### 4A VOLATILE METHOD BLANK SUMMARY

**VBLKCM** 

Lab Name: COMPUCHEM Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25402

Lab File ID: CC981021B56.D

Lab Sample ID: VBLKCM

Date Analyzed: 10/21/98

Time Analyzed: 1844

GC Column:DB624 ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: F50056

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

|         |             | LAB         | LAB                                   | TIME     |
|---------|-------------|-------------|---------------------------------------|----------|
|         | SAMPLE NO.  | SAMPLE ID   | FILE ID                               | ANALYZED |
| 01      | VLCS70      | 915061      | CN015061B56.D                         | 1938     |
| 02      | PZ-12I      | 914750      | CN014750B56.D                         | 2124     |
| 03      | MW-15S      | 914752      | CN014752B56.D                         | 2239     |
| 04      | E101498-2   | 914753      | CN014753B56.D                         | 2315     |
| 05      | MW-11S      | 914754      | CN014754B56.D                         | 2351     |
| 06      | MW-11SDUP   | 914755      | CN014755B56.D                         | 0026     |
| 07      | MWB-3       | 914756      | CN014756B56.D                         | 0102     |
| 08      | MWC-3       | 914757      | CN014757B56.D                         | 0138     |
| 09      |             |             |                                       |          |
| 10      |             |             |                                       | · ·      |
| 11      |             |             |                                       |          |
| 12      |             |             |                                       |          |
| 13      |             |             |                                       |          |
| 14      |             |             |                                       |          |
| 15      |             |             |                                       |          |
| 16      |             |             |                                       |          |
| 17      |             |             |                                       |          |
| 18      |             |             |                                       |          |
| 19      |             |             |                                       |          |
| 20      |             |             |                                       |          |
| 21      |             |             |                                       |          |
| 22      | <del></del> |             |                                       |          |
| 23   24 |             |             |                                       |          |
| 25      |             |             |                                       |          |
| 26      |             |             | <del></del>                           |          |
| 27      |             | <del></del> | <del></del>                           |          |
| 28      |             |             |                                       |          |
| 29      |             |             | · · · · · · · · · · · · · · · · · · · |          |
| 30      |             |             |                                       |          |
| 301     |             |             |                                       |          |

| COMMENTS: |   |                 |
|-----------|---|-----------------|
|           |   | <br><del></del> |
|           | · | <br>            |

SAMPLE NO.

|   | VBLKCM   |  |  |  |
|---|--|--|--|--|
| Project: RFA254   | Date Sampled:  |  |  |  |
| Lab Code: COMPU Case No.: 33902 SAS No.:  | SDG No.: 25402   |  |  |  |
| Matrix: (soil/water) WATER  | Lab Sample ID: VBLKCM  |  |  |  |
| Sample wt/vol: 25.0 (g/mL) ML   | Lab File ID: CC981021B56.D   |  |  |  |
| Level: (low/med) LOW  | Date Received:   |  |  |  |
| % Moisture: not dec.  | Date Analyzed: 10/21/98  |  |  |  |
| GC Column:DB624 ID: 0.53 (mm)   | Dilution Factor: 1.0   |  |  |  |
| Soil Extract Volume:(uL)  | Soil Aliquot Volume:(uL)   |  |  |  |
| CAS NO. COMPOUND  | CONCENTRATION UNITS: UG/L DL CONC Q  |  |  |  |
| 74-83-9Bromomethane 75-01-4Vinyl Chloride 75-00-3Chloroethane 75-09-2Methylene Chloride 75-35-41,1-Dichloroethane 75-34-3Chloroform 107-06-21,2-Dichloroethane 71-55-61,1,1-Trichloroethane 56-23-5Carbon Tetrachloride 75-27-4Bromodichloromethane 10061-01-5cis-1,3-Dichloropropene | 0.5<br>1<br>0.5<br>10<br>0.8<br>0.8<br>0.5<br>0.8<br>0.8<br>0.8<br>0.8<br>0.8<br>0.8<br>0.9<br>0.9<br>0.9<br>0.9<br>0.9<br>0.9<br>0.9<br>0.9 |  |  |  |

79-01-6-----Trichloroethene 124-48-1-----Dibromochloromethane

127-18-4-----Tetrachloroethene

78-87-5----1,2-Dichloropropane

108-10-1-----4-Methyl-2-pentanone

156-60-5----trans-1,2-Dichloroethene

156-59-2----cis-1,2-Dichloroethene

71-43-2----Benzene

108-88-3-----Toluene

100-42-5-----Styrene

67-64-1------Acetone

591-78-6----2-hexanone

78-93-3----2-butanone

75-25-2-----Bromoform

108-90-7-----Chlorobenzene

74-87-3-----Chloromethane

75-15-0-----Carbon disulfide

100-41-4-----Ethylbenzene

79-00-5-----1,1,2-Trichloroethane

10061-02-6----trans-1,3-Dichloropropene

79-34-5----1,1,2,2-Tetrachloroethane

FORM I VOA

U

U U

U

U

U

U

U

U

U

U

U

U

U U

J

U

U

U

Ü

U

2

0.8

0.5

0.8

0.8

0.8

0.5

0.8

0.5

0.8

0.5

0.5

0.5

0.8

0.5

5

2

2

3

0.8

0.5

|            | ı |
|------------|---|
| TIDI IZANA |   |
| VBLKCM     |   |
|            | 1 |

SAMPLE NO.

| Project: RFA254               | Date Sampled:  |            |                          |                     |   |  |
|-------------------------------|----------------|------------|--------------------------|---------------------|---|--|
| Lab Code: COMPU C             | : SDG          | No.: 25402 |                          |                     |   |  |
| Matrix: (soil/water) WATER    |                |            | Lab Sample ID: VBLKCM    |                     |   |  |
| Sample wt/vol:                | 25.0 (g/mL) ML |            | Lab File ID:             | CC981021B56.D       |   |  |
| Level: (low/med) LOW          |                |            | Date Received:           |                     |   |  |
| % Moisture: not dec.          |                |            | Date Analyzed: 10/21/98  |                     |   |  |
| GC Column:DB624 ID: 0.53 (mm) |                |            | Dilution Factor: 1.0     |                     |   |  |
| Soil Extract Volume:(uL)      |                |            | Soil Aliquot Volume:(uL) |                     |   |  |
| CAS NO.                       | COMPOUND       |            | CONCENTRATION DL         | UNITS: UG/L<br>CONC | Q |  |
| 1330-20-7Xylene (total)       |                |            | 0.5                      |                     | U |  |

### 4A VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

VBLKKP

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25402

Lab File ID: CB981023A54.D

Lab Sample ID: VBLKKP

Date Analyzed: 10/23/98

Time Analyzed: 1005

GC Column:SP624 ID: 0.53 (mm)

Heated Purge: (Y/N) N

Instrument ID: F50054

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

|          |   | LAB              | LAB                            | TIME                                    |
|----------|---|------------------|--------------------------------|---|
|          | SAMPLE NO.                              | SAMPLE ID        | FILE ID                        | ANALYZED                                |
|          | ======================================= |                  |                                | ======================================= |
| 01       | VLCS93                                  | 915647           | CN015647A54.D                  | 1052                                    |
| 02       | PZ-12D                                  | 914751           | CR014751A54.D                  | 1431                                    |
| 03       | PZ-14I                                  | 914759           | CR014759A54.D                  | 1537<br>1537                            |
| 04<br>05 | PZ-14I<br>MWA-2DL                       | 914759<br>914760 | CR014759A54.D<br>CR014760A54.D | 1611                                    |
| 06       | PZ-16D                                  | 914761           | CR014760A54.D                  | 1703                                    |
| 07       | MWB-6                                   | 914762           | CR014761A54.D                  | 1736                                    |
| 08       | PZ-8IDL                                 | 914765           | CR014765A54.D                  | 1810                                    |
| 09       | PZ-8DDL                                 | 914766           | CR014766A54.D                  | 1843                                    |
| 10       | PZ-12IDL                                | 914750           | C2R14750A54.D                  | 1919                                    |
| 11       |   |                  |                                |   |
| 12       |   |                  |                                |   |
| 13       |   |                  |                                |   |
| 14       |   |                  |                                |   |
| 15       |   |                  |                                |   |
| 16       |   |                  |                                |   |
| 17       |   |                  |                                |   |
| 18       |   |                  |                                |   |
| 19       |   |                  |                                |   |
| 20<br>21 |   |                  |                                |   |
| 22       |   |                  |                                |   |
| 23       |   |                  | <del></del>                    |   |
| 24       |   |                  |                                |   |
| 25       |   |                  | <del></del>                    |   |
| 26       |   |                  |                                |   |
| 27       |   |                  | ·····                          |   |
| 28       |   |                  |                                |   |
| 29       |   |                  |                                |   |
| 30       |   |                  |                                |   |

| COMMENTS: | •    |
|-----------|------|
|           | <br> |
|           | <br> |

SAMPLE NO.

Project: RFA254

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25402

Matrix: (soil/water) WATER

Lab Sample ID: VBLKKP

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: CB981023A54.D

Level: (low/med) LOW

Date Received: \_\_\_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_\_

Date Analyzed: 10/23/98

GC Column: SP624 ID: 0.53 (mm)

Date Date Sampled: \_\_\_\_\_\_\_\_

SDG No.: 25402

Lab Sample ID: VBLKKP

Lab File ID: CB981023A54.D

Date Analyzed: 10/23/98

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: UG/L

CAS NO. COMPOUND CONC 0.5 74-83-9-----Bromomethane U U 75-01-4-----Vinyl Chloride 75-00-3-----Chloroethane 0.5 U 75-09-2-----Methylene Chloride 15 J 1 75-35-4-----1,1-Dichloroethene U 0.8 75-34-3-----1,1-Dichloroethane 0.5 U 67-66-3-----Chloroform 0.8 U 107-06-2----1,2-Dichloroethane U 0.8 71-55-6-----1,1,1-Trichloroethane U 8.0 56-23-5-----Carbon Tetrachloride U 1 75-27-4-----Bromodichloromethane 0.5 U 10061-01-5----cis-1,3-Dichloropropene 0.5 U 79-01-6-----Trichloroethene 0.8 U 124-48-1-----Dibromochloromethane 0.5 U 79-00-5-----1,1,2-Trichloroethane 0.8 U 71-43-2----Benzene 0.8 Ū 10061-02-6----trans-1,3-Dichloropropene U 0.8 75-25-2-----Bromoform 0.5 U 127-18-4----Tetrachloroethene 0.8 U 79-34-5----1,1,2,2-Tetrachloroethane 0.5 U 108-88-3-----Toluene 0.8 U 108-90-7----Chlorobenzene 0.5 U 100-41-4-----Ethylbenzene 0.5 U 100-42-5----Styrene 0.5 U 78-87-5----1,2-Dichloropropane U 0.8 74-87-3-----Chloromethane U 1 75-15-0-----Carbon disulfide 0.5 U 67-64-1------Acetone 5 1 | J 108-10-1-----4-Methy1-2-pentanone 2 U 591-78-6-----2-hexanone\_\_\_\_ 2 U 78-93-3----2-butanone 3 U 156-60-5-----trans-1,2-Dichloroethene 0.8 U 156-59-2----cis-1,2-Dichloroethene 0.5

| VBLKKP |
|--------|
|--------|

SAMPLE NO.

| Project: RFA254      |                 |          | Date Sampled:    | <del></del>         |    |
|----------------------|-----------------|----------|------------------|---------------------|----|
| Lab Code: COMPU      | Case No.: 33902 | SAS No.: | SDG 1            | No.: 25402          |    |
| Matrix: (soil/water) | ) WATER         |          | Lab Sample ID:   | VBLKKP              |    |
| Sample wt/vol:       | 25.0 (g/mL) ML  |          | Lab File ID:     | CB981023A54.D       |    |
| Level: (low/med)     | LOW             |          | Date Received:   |                     |    |
| % Moisture: not dec. | ·               |          | Date Analyzed:   | 10/23/98            |    |
| GC Column:SP624      | ID: 0.53 (mm)   |          | Dilution Factor  | c: 1.0              |    |
| Soil Extract Volume: | :(uL)           |          | Soil Aliquot Vo  | olume:(u            | ւ) |
| CAS NO.              | COMPOUND        |          | CONCENTRATION DL | UNITS: UG/L<br>CONC | Q  |
| 1330-20-7Xy          | vlene (total)   |          | 0.5              |                     | U  |
|                      |                 |          |                  |                     |    |

### 4A VOLATILE METHOD BLANK SUMMARY

**VBLKLF** 

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25402

Lab File ID: CB981022B54.D

Lab Sample ID: VBLKLF

Date Analyzed: 10/22/98

Time Analyzed: 1955

GC Column:SP624 ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: F50054

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

|             | LAB   | LAB                    | TIME                             |
|-------------|---|------------------------|----------------------------------|
| SAMPLE NO.  | SAMPLE ID                                       | FILE ID                | ANALYZED                         |
| VLCS39      | 915825  | CN015825B54.D          | 2104                             |
| MW-10S      | 914768  | CN014768B54.D          | 0255                             |
|             |   |                        | 0328                             |
| TBLK101498  | 914747  | CR014747B54.D          | 0402                             |
|             |   |                        | <del></del>                      |
|             |   |                        |                                  |
|             |   |                        |                                  |
|             |   |                        |                                  |
| )           |   | <del></del>            |                                  |
|             |   |                        |                                  |
|             |   |                        |                                  |
| <del></del> |   |                        |                                  |
|             |   |                        |                                  |
|             |   |                        |                                  |
|             |   |                        |                                  |
|             |   |                        |                                  |
|             |   |                        |                                  |
|             |   |                        |                                  |
|             |   |                        |                                  |
|             |   |                        |                                  |
|             |   |                        |                                  |
|             |   |                        |                                  |
|             | i   |                        |                                  |
|             |   | <del></del>            |                                  |
|             | SAMPLE NO.  =================================== | SAMPLE NO.   SAMPLE ID | SAMPLE NO.   SAMPLE ID   FILE ID |

| COMMENTS:   |      |             |      |                 |
|-------------|------|-------------|------|-----------------|
| <del></del> | <br> |             | <br> | <br><del></del> |
|             |      |             |      |                 |
|             | <br> | <del></del> | <br> | <br>            |

SAMPLE NO.

VBLKLF

|                     |  |                                  | '   |                     | '                               |
|---------------------|--|----------------------------------|---|---------------------|---------------------------------|
| Project: RFA254     |  |                                  | Date Sampled:   |                     |                                 |
| Lab Code: COMPU     | Case No.: 33902  | SAS No.                          | : SDG   | No.: 25402          |                                 |
| Matrix: (soil/water | ) WATER  |                                  | Lab Sample ID:  | VBLKLF              |                                 |
| Sample wt/vol:      | 25.0 (g/mL) ML   |                                  | Lab File ID:  | CB981022B54.D       | )                               |
| Level: (low/med)    | LOW  |                                  | Date Received:  |                     |                                 |
| % Moisture: not dec | •  |                                  | Date Analyzed:  | 10/22/98            |                                 |
| GC Column:SP624     | ID: 0.53 (mm)  |                                  | Dilution Facto  | r: 1.0              |                                 |
| Soil Extract Volume | :(uL)  |                                  | Soil Aliquot V  | olume:(u            | .L)                             |
| CAS NO.             | COMPOUND   |                                  | CONCENTRATION<br>DL   | UNITS: UG/L<br>CONC | Q                               |
| 74-83-9             | inyl Chloride hloroethane thylene Chloride 1-Dichloroethane 1-Dichloroethane 1-Dichloroethane 1-Dichloroethane 1-Dichloroethane 1,1-Trichloroethane 1,1-Trichloromethane comodichloromethane s-1,3-Dichloroproprichloroethene bromochloromethane 1,2-Trichloroethane 1,2-Trichloroethane 1,2-Trichloroethane 1,2-Trichloroethane 1,2,2-Tetrachloroethene 1,2-Dichloropropane 10romethane rbon disulfide etone Methyl-2-pentanone hexanone butanone | ne e e e pene e ne ropene ethane | 0.51<br>0.51<br>0.51<br>0.58<br>0.88<br>0.89<br>0.89<br>0.89<br>0.89<br>0.89<br>0.89<br>0.8 | 0.8                 | מממממממממממממממממממממממממממממממ |

VBLKLF

SAMPLE NO.

| Project: RFA254                 | Date Sampled:                       |
|---------------------------------|-------------------------------------|
| Lab Code: COMPU Case No.: 33902 | SAS No.: SDG No.: 25402             |
| Matrix: (soil/water) WATER      | Lab Sample ID: VBLKLF               |
| Sample wt/vol: 25.0 (g/mL) ML   | Lab File ID: CB981022B54.D          |
| Level: (low/med) LOW            | Date Received:                      |
| % Moisture: not dec.            | Date Analyzed: 10/22/98             |
| GC Column:SP624 ID: 0.53 (mm)   | Dilution Factor: 1.0                |
| Soil Extract Volume:(uL)        | Soil Aliquot Volume:(uL)            |
| CAS NO. COMPOUND                | CONCENTRATION UNITS: UG/L DL CONC Q |
| 1330-20-7Xylene (total)         | 0.5 U                               |

### 4A VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

VBLKLT.

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25402

Lab File ID: CB981023B54.D

Lab Sample ID: VBLKLT

Date Analyzed: 10/23/98

Time Analyzed: 2156

GC Column:SP624 ID: 0.53 (mm)

Heated Purge: (Y/N) N

Instrument ID: F50054

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

|          |   | LAB         | LAB                                     | TIME      |
|----------|---|-------------|---|-----------|
|          | SAMPLE NO.                              | SAMPLE ID   | FILE ID                                 | ANALYZED  |
|          | ======================================= | ==========  | ======================================= | =======   |
| 01       | VLCS06                                  | 916198      | CN016198B54.D                           | 2241      |
| 02       | PZ-9DDL                                 | 914767      | CR014767B54.D                           | 2319      |
| 03       | MWB-3DL                                 | 915756      | C2R14756B54.D                           | 2354      |
| 04       | PZ-14IDL                                | 914759      | C2R14759B54.D                           | 0029      |
| 05       | MWA-2DLMS                               | 914748      | CN014748B54.D                           | 0104      |
| 06       | MWA-2DLMSD                              | 914749      | CN014749B54.D                           | 0135      |
| 07       |   |             |   |           |
| 08       | <br>                                    |             |   | ·         |
| 09       |   |             |   |           |
| 10       | <del></del> _                           |             |   | <u></u> - |
| 11       | · <del></del> :                         | <del></del> |   |           |
| 12<br>13 |   |             |   |           |
| 14       |   |             |   |           |
| 15       |   | <del></del> |   |           |
| 16       |   |             |   |           |
| 17       |   |             |   |           |
| 18       |   | <del></del> |   |           |
| 19       |   |             |   |           |
| 20       |   |             |   |           |
| 21       |   |             |   |           |
| 22       |   |             |   |           |
| 23       |   | <del></del> |   |           |
| 24       |   |             |   |           |
| 25       |   |             |   |           |
| 26       |   |             |   |           |
| 27       |   |             |   |           |
| 28       |   |             |   |           |
| 29       |   |             |   |           |
| 30       |   |             |   |           |

| COMMENTS: |             |             |      |      |
|-----------|-------------|-------------|------|------|
|           |             |             | <br> | <br> |
|           | <del></del> | <del></del> | <br> | <br> |

| VBLKLT |
|--------|
|--------|

SAMPLE NO.

| ,                    |  |  |   |                    |      |   |
|----------------------|--|--|---|--------------------|------|---|
| Project:             |  | Date   | e Sampled:  |                    |      |   |
| Lab Code: COMPU      | Case No.: 33902  | SAS No.:   | SDG   | No.: 25402         |      |   |
| Matrix: (soil/water) | WATER  | Lab  | Sample ID:  | VBLKLT             |      |   |
| Sample wt/vol:       | 25.0 (g/mL) ML   | Lab  | File ID:  | CB981023B5         | 54.D |   |
| Level: (low/med)     | LOW  | Date   | e Received:   |                    |      |   |
| % Moisture: not dec. |  | Date   | e Analyzed:   | 10/23/98           |      |   |
| GC Column:SP624      | ID: 0.53 (mm)  | Dil  | ution Facto   | r: 1.0             |      |   |
| Soil Extract Volume: | (uL)   | Soil   | l Aliquot V   | olume:             | (uL  | ) |
| CAS NO.              | COMPOUND   | COI  | NCENTRATION<br>DL   | UNITS: UG/<br>CONC | 'L   | Q |
| 74-83-9              | nyl Chloride loroethane chylene Chloride l-Dichloroethane l-Dichloroethane loroform 2-Dichloroethane l,1-Trichloroethane chon Tetrachloride comodichloromethane chloroethene cromochloromethane l,2-Trichloroethan chloroethene cromoform crachloroethene crachloroethene crachloroethene crachloroethene crachloroethene crachloroethene crachloroethene crachloroethene crachloroethene crachloropropane cromethane chon disulfide ctone dethyl-2-pentanone dexanone cutanone cutanone cutanone cutanone | neeene | 0.5155858881558223885<br>0.15585888858585558155223885<br>0.0000000000000000000000000000000000 |                    | 1    |   |

SAMPLE NO.

| Project:             |                 |         | Date Sampled:       |                     |    |
|----------------------|-----------------|---------|---------------------|---------------------|----|
| Lab Code: COMPU      | Case No.: 33902 | SAS No. | : SDG               | No.: 25402          |    |
| Matrix: (soil/water) | ) WATER         |         | Lab Sample ID:      | VBLKLT              |    |
| Sample wt/vol:       | 25.0 (g/mL) ML  |         | Lab File ID:        | CB981023B54.D       |    |
| Level: (low/med)     | LOW             |         | Date Received:      |                     |    |
| % Moisture: not dec. |                 |         | Date Analyzed:      | 10/23/98            |    |
| GC Column:SP624      | ID: 0.53 (mm)   |         | Dilution Factor     | r: 1.0              |    |
| Soil Extract Volume: | (uL)            |         | Soil Aliquot Vo     | olume:(u            | L) |
| CAS NO.              | COMPOUND        |         | CONCENTRATION<br>DL | UNITS: UG/L<br>CONC | Q  |
| 1330-20-7Xy          | lene (total)    |         | 0.5                 |                     | U  |

## VOLATILE METHOD BLANK SUMMARY

**VBLKRZ** 

Contract: 501112 Lab Name: COMPUCHEM

Lab Code: COMPU Case No.: 33902 SAS No.:

SDG No.: 25402

Lab File ID: CB981022A56.D

Lab Sample ID: VBLKRZ

Date Analyzed: 10/22/98

Time Analyzed: 0953

GC Column:DB624 ID: 0.53 (mm)

Heated Purge: (Y/N) N

Instrument ID: F50056

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

|    |             | LAB                                     | LAB           | TIME      |
|----|-------------|---|---------------|-----------|
|    | SAMPLE NO.  | SAMPLE ID                               | FILE ID       | ANALYZED  |
|    | ========    | ======================================= | ==========    | ========= |
| 01 | VLCS87      | VLCS87                                  | CN015602A56.D | 1151      |
| 02 | MWA-2       | 914760                                  | CN014760A56.D | 1331      |
| 03 | PZ-16DDL    | 914761                                  | CN014761A56.D | 1407      |
| 04 | MW-8S       | 914763                                  | CN014763A56.D | 1521      |
| 05 | E101598-3   | 914764                                  | CN014764A56.D | 1556.     |
| 06 | PZ-8I       | 914765                                  | CN014765A56.D | 1630      |
| 07 | PZ-8D       | 914766                                  | CN014766B56.D | 1706      |
| 08 | PZ-9D       | 914767                                  | CN014767B56.D | 1747      |
| 09 |             | }                                       |               |           |
| 10 |             |   |               |           |
| 11 | <del></del> | <del></del>                             |               |           |
| 12 |             |   |               |           |
| 13 |             |   |               |           |
| 14 |             |   |               |           |
| 15 |             |   |               |           |
| 16 |             |   |               |           |
| 17 |             |   |               |           |
| 18 |             |   |               |           |
| 19 |             |   |               |           |
| 20 |             |   |               |           |
| 21 |             |   |               |           |
| 22 |             |   |               |           |
| 23 |             |   |               |           |
| 24 |             |   |               |           |
| 25 |             |   |               |           |
| 26 | <u> </u>    |   |               |           |
| 27 |             |   |               |           |
| 28 |             |   |               |           |
| 29 |             |   |               |           |
| 30 |             |   |               |           |
|    |             |   |               |           |

| COMMENTS: |             |
|-----------|-------------|
|           |             |
|           |             |
|           |             |
|           | <del></del> |

|        | - 1 |
|--------|-----|
| VBLKRZ | -   |
|        | - [ |

SAMPLE NO.

|  |  |                           | l  |
|--|--|---------------------------|--|
| Project: RFA254                                  |  | Date Sample               | ed:  |
| Lab Code: COMPU                                  | Case No.: 33902  | SAS No.:                  | SDG No.: 25402   |
| Matrix: (soil/water                              | ) WATER  | Lab Sample                | ID: VBLKRZ   |
| Sample wt/vol:                                   | 25.0 (g/mL) ML   | Lab File ID               | D: CB981022A56.D   |
| Level: (low/med)                                 | LOW  | Date Receiv               | red:   |
| % Moisture: not dec                              | ·  | Date Analyz               | ed: 10/22/98   |
| GC Column:DB624                                  | ID: 0.53 (mm)  | Dilution Fa               | ictor: 1.0   |
| Soil Extract Volume                              | :(uL)  | Soil Aliquo               | ot Volume:(uL)   |
| CAS NO.  | COMPOUND   | CONCENTRAT<br>DL          | TION UNITS: UG/L<br>CONC Q   |
| 75-00-3C 75-09-2                                 | inyl Chloride hloroethane ethylene Chloride ,1-Dichloroethane ,1-Dichloroethane hloroform ,2-Dichloroethane ,1,1-Trichloroethane arbon Tetrachlorid romodichloromethan is-1,3-Dichloropro richloroethene ibromochloromethan ethylene ethylene llorobenzene tyrene 2-Dichloropropane aloromethane | ene () copene () thane () | 0.5<br>10<br>0.5<br>10<br>0.8<br>0.8<br>0.8<br>0.8<br>0.8<br>0.5<br>0.8<br>0.5<br>0.8<br>0.5<br>0.8<br>0.5<br>0.8<br>0.5<br>0.8<br>0.5<br>0.8<br>0.5<br>0.8<br>0.5<br>0.8<br>0.5<br>0.8<br>0.5<br>0.8<br>0.5<br>0.8<br>0.5<br>0.8<br>0.5<br>0.8<br>0.5<br>0.8<br>0.5<br>0.8<br>0.8<br>0.8<br>0.8<br>0.8<br>0.8<br>0.8<br>0.8 |
| 67-64-1Ac<br>108-10-14-<br>591-78-62-<br>78-93-3 | Methyl-2-pentanone<br>hexanone<br>butanone   | hene                      | 5 3 J<br>U<br>U<br>U<br>U<br>U<br>U<br>U   |
| 156-59-2ci                                       |  |                           | 7 5  |

| VBLKRZ  |  |
|---------|--|
| VDDICKZ |  |

SAMPLE NO.

| Project: RFA254         | •             |          | Date Sampled: _     | <del></del>         |    |
|-------------------------|---------------|----------|---------------------|---------------------|----|
| Lab Code: COMPU Case    | e No.: 33902  | SAS No.: | SDG 1               | No.: 25402          |    |
| Matrix: (soil/water) WA | TER           |          | Lab Sample ID:      | VBLKRZ              |    |
| Sample wt/vol: 25       | 5.0 (g/mL) ML |          | Lab File ID:        | CB981022A56.D       |    |
| Level: (low/med) LOW    | W             |          | Date Received:      |                     |    |
| % Moisture: not dec.    |               |          | Date Analyzed:      | 10/22/98            |    |
| GC Column:DB624 ID      | : 0.53 (mm)   |          | Dilution Factor     | : 1.0               |    |
| Soil Extract Volume:    | (uL)          | ;        | Soil Aliquot Vo     | olume:(u            | L) |
| CAS NO.                 | COMPOUND      |          | CONCENTRATION<br>DL | UNITS: UG/L<br>CONC | Q  |
| 1330-20-7Xylene         | e (total)     |          | 0.5                 |                     | U  |

## 2A WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: COMPUCHEM Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25402

|     | 1                                       | 01/01  | 01400  | GMG2              | COULTER  | T mom     |
|-----|---|--------|--------|-------------------|----------|-----------|
|     | CAMPIE NO                               | SMC1   | SMCZ   | SMC3              | OTHER    | TOT       |
|     | SAMPLE NO.                              | (DBF)# | (TOL)# | (BFB)#            | Í        | OUT       |
| ~ - | ======================================= |        | ====== | <del>*==</del> == | \ ====== | { = ≈ = { |
| 01  | E101498-2                               | 117    | 91     | 85                |          | 0         |
| 02  | 1                                       | 113    | 117    | 95                | l        | 0         |
| 03  | ,                                       | 93     | 95     | 92                | l        | 0         |
| 04  |   | 112    | 103    | 88                |          | 0         |
| 05  |   | 106    | 93     | 88                |          | 0         |
| 06  |   | 120    | 102    | 89                |          | 0         |
| 07  | MW-8S                                   | 121    | 112    | 86                |          | 0         |
| 08  | MWA-2                                   | 122    | 108    | 93                |          | 0         |
| 09  | MWA-2DL                                 | 106    | 105    | 100               |          | 0 (       |
| 10  | MWA-2DLMS                               | 93     | 101    | 107               |          | 0 [       |
| 11  | MWA-2DLMSD                              | 93     | 92     | 90                |          | 0         |
| 12  | MWB-3                                   | 120    | 117    | 99                |          | 0 [       |
| 13  | MWB-3DL                                 | 96     | 96     | 95                |          | 0         |
| 14  | MWB-6                                   | 99 (   | 113    | 110               |          | 0         |
| 15  | MWC~3                                   | 109    | 103    | 87                |          | 0)        |
| 16  | PZ-10I                                  | 95     | 96     | 92                |          | 0         |
| 17  | PZ-12D                                  | 102    | 102    | 96                |          | 0)        |
| 18  | PZ-12I                                  | 131*   | 96     | 84                |          | 1         |
| 19  | PZ-12IDL                                | 102    | 106    | 103               |          | 0         |
| 20  | PZ-14I                                  | 109    | 105    | 96                |          | 0         |
| 21  | PZ-14IDL                                | 97     | 94     | 89                | /        | o l       |
| 22  | PZ-16D                                  | 95     | 106    | 104               |          | 0         |
| 23  | PZ-16DDL                                | 117    | 97     | 84                |          | 0         |
| 24  | PZ-8D                                   | 141*   | 140*   | 124               |          | 2         |
| 25  | PZ-8DDL                                 | 103    | 105    | 102               |          | 0         |
|     | PZ-8I                                   | 120    | 107    | 86                |          | 0         |
| 27  | PZ-8IDL                                 | 98     | 108    | 105               |          | o         |
| 28  | PZ-9D                                   | 126    | 120    | 95                |          | ol        |
| 29  | PZ-9DDL                                 | 119    | 95     | 88                |          | o l       |
| 30  | TBLK101498                              | 93     | 97     | 90                |          | o l       |
| 201 | 101111111111111111111111111111111111111 | J      | 2, 1   | 20                |          | 9         |

|      |       |    |                      | QC LIMITS |
|------|-------|----|----------------------|-----------|
| SMC1 | (DBF) | =  | Dibromofluoromethane | (70-130)  |
| SMC2 | (TOL) | =  | Toluene-d8           | (70-130)  |
| SMC3 | (BFB) | == | Bromofluorobenzene   | (70-130)  |

<sup>#</sup> Column to be used to flag recovery values

<sup>\*</sup> Values outside of contract required QC limits

D System Monitoring Compound diluted out

### 2A WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: COMPUCHEM Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25402

| SAMPLE NO.   (DBF) # (TOL) # (BFB) #   OUT   = = = = = = = = = = = = = = = = = =  |    | 1             | SMC1        | SMC2     | SMC3   | OTHER       | TOT |
|---|----|---------------|-------------|----------|--------|-------------|-----|
| 01 VBLKCM   |    | SAMPLE NO.    |             |          |        |             |     |
| 02       VBLKKP       123       104       96       0         03       VBLKLF       100       94       83       0         04       VBLKLT       101       96       91       0         05       VBLKRZ       114       85       85       0         06       VLCS06       97       98       96       0         07       VLCS39       89       100       101       0         08       VLCS70       111       87       94       0         09       VLCS87       102       86       107       0         11       12       107       107       0         12       13       101       107       107       0         18       19       10 <td></td> <td>=========</td> <td>=====</td> <td>=====</td> <td>======</td> <td>=====</td> <td>===</td> |    | =========     | =====       | =====    | ====== | =====       | === |
| 03 VBLKLF 100 94 83 00 04 VBLKLT 101 96 91 00 05 VBLKRZ 114 85 85 00 06 VLCS06 97 98 96 00 07 VLCS39 89 100 101 00 08 VLCS70 111 87 94 00 09 VLCS87 102 86 107 00 10 VLCS93 101 107 107 00 11 12 12 13 14 15 16 16 17 18 19 19 10 10 10 10 10 10 10 10 10 10 10 10 10   | 01 |               |             | 83       | 77     |             | 0   |
| 04 VBLKLT 101 96 91 0 05 VBLKRZ 114 85 85 0 06 VLCS06 97 98 96 0 07 VLCS39 89 100 101 0 08 VLCS70 111 87 94 0 09 VLCS87 102 86 107 0 11 12 12 13 14 15 16 16 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19   |    | 1             | 1           |          |        |             |     |
| 05 VBLKRZ   |    | ī l           |             |          |        |             |     |
| 06 VLCS06 97 98 96 00 07 VLCS39 89 100 101 00 08 VLCS70 111 87 94 00 09 VLCS87 102 86 107 0 10 VLCS93 101 107 107 0 11  |    | !             |             |          |        |             |     |
| 07 VLCS39 89 100 101 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  |    |               |             |          |        |             |     |
| 08 VLCS70   |    |               |             |          |        |             |     |
| 09 VLCS87   |    |               |             |          |        |             |     |
| 10 VLCS93   |    |               |             |          |        |             |     |
| 11       12         13  |    |               |             |          |        |             |     |
| 12  |    | VIIC593       | 101         | 10,      | 107    | <del></del> |     |
| 13  |    | <del>  </del> |             |          |        |             |     |
| 14       15         16       17         18       19         20       21         22       22         23       24         25       26         27       28         29       29   |    | <del></del>   |             |          |        |             |     |
| 16  |    |               |             |          |        |             |     |
| 17 18 19 20 21 22 23 24 25 26 27 28 29  | 15 |               |             |          |        |             |     |
| 18         19         20         21         22         23         24         25         26         27         28         29   |    |               |             |          |        |             |     |
| 19  |    |               |             | <u> </u> |        |             |     |
| 20  |    |               | ]           |          |        |             |     |
| 21  |    |               |             |          |        |             |     |
| 22<br>23<br>24<br>25<br>26<br>27<br>28<br>29  |    |               |             |          |        |             |     |
| 23<br>24<br>25<br>26<br>27<br>28<br>29  |    |               |             |          |        |             |     |
| 24<br>25<br>26<br>27<br>28<br>29  |    |               |             |          |        |             |     |
| 25<br>26<br>27<br>28<br>29  |    |               | <del></del> |          |        |             |     |
| 26<br>27<br>28<br>29  |    |               |             |          |        |             |     |
| 27<br>28<br>29  |    |               |             |          |        |             |     |
| 29  |    |               |             |          |        |             |     |
|   |    |               |             |          |        |             |     |
| 30  |    |               |             |          |        |             |     |
|   | 30 |               |             |          |        |             |     |

SMC1 (DBF) = Dibromofluoromethane (70-130) SMC2 (TOL) = Toluene-d8 (70-130) SMC3 (BFB) = Bromofluorobenzene (70-130)

- # Column to be used to flag recovery values
- \* Values outside of contract required QC limits
- D System Monitoring Compound diluted out

# 3A WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25402

Matrix Spike - Sample No.: MWA-2DL

|   | SPIKE   | SAMPLE        | MS            | MS    | QC.    |
|---|---------|---------------|---------------|-------|--------|
| 1                                       | ADDED   | CONCENTRATION | CONCENTRATION | 8     | LIMITS |
| COMPOUND                                | (ug/L)  | (ug/L)        | (ug/L)        | REC # | REC.   |
| ======================================= | ======= | =========     | ==========    | ===== | =====  |
| Bromomethane                            | 835.0   | 0.000         | 765.8         | 92    | 20-150 |
| Vinyl Chloride                          | 835.0   | 0.000         | 653.1         | 78    | 20-150 |
| Chloroethane                            | 835.0   | 0.000         | 785.2         | 94    | 20-150 |
| Methylene Chloride                      | 835.0   | 125.3         | 853.0         | 87    | 20-300 |
| 1,1-Dichloroethene                      | 835.0   | 0.000         | 824.2         | 99    | 20-150 |
| 1,1-Dichloroethane                      | 835.0   | 0.000         | 844.6         | 101   | 20-150 |
| Chloroform                              | 835.0   | 0.000         | 787.7         | 94    | 20-150 |
| 1,2-Dichloroethane                      | 835.0   | 0.000         | 866.6         | 104   | 20-150 |
| 1,1,1-Trichloroethane                   | 835.0   | 1160          | 1916          | 90    | 20-150 |
| Carbon Tetrachloride                    | 835.0   | 0.000         | 841.4         | 101   | 20-150 |
| Bromodichloromethane                    | 835.0   | 0.000         | 884.0         | 106   | 20-150 |
| cis-1,3-Dichloropropene                 | 835.0   | 0.000         | 831.5         | 100   | 20-150 |
| Trichloroethene                         | 835.0   | 851.9         | 1761          | 109   | 20-150 |
| Dibromochloromethane                    | 835.0   | 0.000         | 869.8         | 104   | 20-150 |
| 1,1,2-Trichloroethane                   | 835.0   | 0.000         | 828.6         | 99    | 20-150 |
| Benzene                                 | 835.0   | 0.000         | 798.8         | 96    | 20-150 |
| trans-1,3-Dichloroprope                 | 835.0   | 0.000         | 510.2         | 61    | 20-150 |
| Bromoform                               | 835.0   | 0.000         | 877.1         | 105   | 20-150 |
| Tetrachloroethene                       | 835.0   | 2300          | 2810          | 61    | 20-150 |
| 1,1,2,2-Tetrachloroetha                 | 835.0   | 0.000         | 894.8         | 107   | 20-150 |
| Toluene                                 | 835.0   | 0.000         | 895.0         | 107   | 20-150 |
| Chlorobenzene                           | 835.0   | 0.000         | 883.8         | 106   | 20-150 |
| Ethylbenzene                            | 835.0   | 0.000         | 897.8         | 108   | 20-150 |
| Styrene                                 | 835.0   | 0.000         | 863.9         | 103   | 20-150 |
| 1,2-Dichloropropane                     | 835.0   | 0.000         | 847.0         | 101   | 20-150 |
| Chloromethane                           | 835.0   | 0.000         | 733.4         | 88    | 20-150 |
| Carbon disulfide                        | 835.0   | 0.000         | 777.2         | 93    | 20-150 |
| Acetone                                 | 4175    | 0.000         | 3785          | 91    | 20-300 |
| 4-Methyl-2-pentanone                    | 4175    | 0.000         | 3907          | 94    | 20-300 |
| 2-hexanone                              | 4175    | 0.000         | 3943          | 94    | 20-300 |
|   |         |               |               |       |        |

### ЗА WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25402

Matrix Spike - Sample No.: MWA-2DL

| COMPOUND                | SPIKE  | SAMPLE        | MS            | MS    | QC.    |
|-------------------------|--------|---------------|---------------|-------|--------|
|                         | ADDED  | CONCENTRATION | CONCENTRATION | %     | LIMITS |
|                         | (ug/L) | (ug/L)        | (ug/L)        | REC # | REC.   |
| 2-butanone              | 4175   | 0.000         | 3978          | 95    | 20-300 |
| trans-1,2-Dichloroethen | 835.0  | 0.000         | 824.3         | 99    | 20-150 |
| cis-1,2-Dichloroethene  | 835.0  | 848.9         | 1573          | 87    | 20-150 |
| Xylene (total)          | 2505   | 0.000         | 2797          | 112   | 20-150 |

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25402

Matrix Spike - Sample No.: MWA-2DL

|   | SPIKE   | MSD                                     | MSD    |       | T     |        |
|---|---------|---|--------|-------|-------|--------|
|   | ADDED   | CONCENTRATION                           | %      | %     | OC L  | IMITS  |
| COMPOUND                                | (ug/L)  | (ug/L)                                  | REC #  | RPD#  | RPD   | REC.   |
| 3====================================== | ======= | ======================================= | ====== | ===== | ===== | =====  |
| Bromomethane                            | 835.0   | 664.4                                   | 80     | 14    | 25    | 20-150 |
| Vinyl Chloride                          | 835.0   | 670.7                                   | 80     | 2     | 25    | 20-150 |
| Chloroethane                            | 835.0   | 768.3                                   | 92     | 2     | 25    | 20-150 |
| Methylene Chloride                      | 835.0   | 795.7                                   | 80     | 8     | 25    | 20-300 |
| 1,1-Dichloroethene                      | 835.0   | 725.2                                   | 87     | 13    | 25    | 20-150 |
| 1,1-Dichloroethane                      | 835.0   | 742.0                                   | 89     | 13    | 25    | 20-150 |
| Chloroform                              | 835.0   | 765.4                                   | 92     | 2     | 25    | 20-150 |
| 1,2-Dichloroethane                      | 835.0   | 815.3                                   | 98     | 6     | 25    | 20-150 |
| 1,1,1-Trichloroethane                   | 835.0   | 1815                                    | 78     | 14    | 25    | 20-150 |
| Carbon Tetrachloride                    | 835.0   | 742.2                                   | 89     | 13    | 25    | 20-150 |
| Bromodichloromethane                    | 835.0   | 685.9                                   | 82     | 26*   | 25    | 20-150 |
| cis-1,3-Dichloropropene                 | 835.0   | 679.4                                   | 81     | 21    | 25    | 20-150 |
| Trichloroethene                         | 835.0   | 1552                                    | 84     | 26*   | 25    | 20-150 |
| Dibromochloromethane                    | 835.0   | 748.0                                   | 90     | 14    | 25    | 20-150 |
| 1,1,2-Trichloroethane                   | 835.0   | 751.5                                   | 90     | 10    | 25    | 20-150 |
| Benzene                                 | 835.0   | 771.4                                   | 92     | 4     | 25    | 20-150 |
| trans-1,3-Dichloroprope                 | 835.0   | 645.0                                   | 77     | 23    | 25    | 20-150 |
| Bromoform                               | 835.0   | 713.4                                   | 85     | 21    | 25    | 20-150 |
| Tetrachloroethene                       | 835.0   | 2596                                    | 35     | 54*   | 25    | 20-150 |
| 1,1,2,2-Tetrachloroetha                 | 835.0   | 758.4                                   | 91     | 16    | 25    | 20-150 |
| Toluene                                 | 835.0   | 735.4                                   | 88     | 19    | 25    | 20-150 |
| Chlorobenzene                           | 835.0   | 769.5                                   | 92     | 14    | 25    | 20-150 |
| Ethylbenzene                            | 835.0   | 771.6                                   | 92     | 16    | 25    | 20-150 |
| Styrene                                 | 835.0   | 736.0                                   | 88     | 16    | 25    | 20-150 |
| 1,2-Dichloropropane                     | 835.0   | 719.5                                   | 86     | 16    | 25    | 20-150 |
| Chloromethane                           | 835.0   | 743.9                                   | 89     | 1     | 25    | 20-150 |
| Carbon disulfide                        | 835.0   | 728.3                                   | 87     | 7     | 25    | 20-150 |
| Acetone                                 | 4175    | 3606                                    | 86     | 6     | 25    | 20-300 |
| 4-Methyl-2-pentanone                    | 4175    | 3321                                    | 80     | 16    | 25    | 20-300 |
| 2-hexanone                              | 4175    | 3134                                    | 75     | 22    | 25    | 20-300 |
|   |         |   |        |       |       |        |

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25402

Matrix Spike - Sample No.: MWA-2DL

| COMPOUND  | SPIKE<br>ADDED<br>(ug/L)       | MSD<br>CONCENTRATION<br>(ug/L) | MSD<br>%<br>REC #    | %<br>RPD #          | QC L.<br>RPD                     | IMITS<br>REC.                        |
|---|--------------------------------|--------------------------------|----------------------|---------------------|----------------------------------|--------------------------------------|
| 2-butanone<br>trans-1,2-Dichloroethen<br>cis-1,2-Dichloroethene<br>Xylene (total) | 4175<br>835.0<br>835.0<br>2505 | 1509                           | 99<br>86<br>79<br>94 | 4<br>14<br>10<br>17 | 25<br>25<br>25<br>25<br>25<br>25 | 20-300<br>20-150<br>20-150<br>20-150 |

- # Column to be used to flag recovery and RPD values with an asterisk
- \* Values outside of QC limits

RPD: 3 out of 34 outside limits

Spike Recovery: 0 out of 68 outside limits

| COMMENTS: |      |      |      |      |
|-----------|------|------|------|------|
|           | <br> | <br> | <br> | <br> |
|           |      |      |      |      |
|           |      |      |      |      |

Lab Name: COMPUCHEM Contract: 501112

VLCS06

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25402

Lab Sample ID: 916198 LCS Lot No.: SE115

Lab File ID: CN016198B54.D Date Analyzed: 10/23/98

Purge Volume: 25.0 (mL) Dilution Factor: 1.0

|                           | AMOUNT | AMOUNT        | Ī   |        |
|---------------------------|--------|---------------|-----|--------|
|                           | ADDED  | RECOVERED     |     | QC     |
| COMPOUND                  | (ug/L) | (ug/L)        |     | LIMITS |
| 1,1,1-Trichloroethane     | 5.00   | 4.94          | 99  | 20-150 |
| 1,1,2-Trichloroethane     | 5.00   |               |     | 20-150 |
| 1,2-Dichloroethane        | 5.00   |               |     | 20-150 |
| Benzene                   | 5.00   | 4.66          | 1   | 20-150 |
| Bromodichloromethane      | 5.00   | 4.45          |     | 20-150 |
| Bromoform                 | 5.00   | 4.31          | 1   | 20-150 |
| Bromomethane              | 5.00   | 5.02          | I . | 20-150 |
| Carbon Tetrachloride      | 5.00   | 4.71          |     | 20-150 |
| Carbon disulfide          | 5.00   | 4.88          | 98  | 20-150 |
| Chloroethane              | 5.00   | 5.00          | í   | 20-150 |
| Dibromochloromethane      | 5.00   | 4.30          | 86  | 20-150 |
| Styrene                   | 5.00   | 4.36          | 1   | 20-150 |
| Tetrachloroethene         | 5.00   | 4.72          |     | 20-150 |
| Trichloroethene           | 5.00   | 4.62          |     | 20-150 |
| cis-1,2-Dichloroethene    | 5.00   | 4.55          |     | 20-150 |
| cis-1,3-Dichloropropene   | 5.00   | 4.39          |     | 20-150 |
| trans-1,2-Dichloroethene  | 5.00   | 4.69          |     | 20-150 |
| trans-1,3-Dichloropropene | 5.00   | 3 <i>.</i> 62 | 72  | 20-150 |
| Xylene (total)            | 15.00  | 14.37         | 96  | 20-150 |
| Methylene Chloride        | 5.00   | 5.17          | 104 | 20-300 |
| 2-butanone                | 25.00  | 25.69         | 103 | 20-300 |
| 2-hexanone                | 25.00  | 22.83         | 91  | 20-300 |
| 4-Methyl-2-pentanone      | 25.00  | 22.77         | 91  | 20-300 |
| Acetone                   | 25.00  | 24.16         | 97  | 20-300 |
| 1,1,2,2-Tetrachloroethane | 5.00   | 4.29          | 86  | 20-150 |
| 1,1-Dichloroethane        | 5.00   | 4.71          | 94  | 20-150 |
| 1,1-Dichloroethene        | 5.00   | 4.72          | 94  | 20-150 |
| 1,2-Dichloropropane       | 5.00   | 4.48          | 90  | 20-150 |
| Chlorobenzene             | 5.00   | 4.52          | 90  | 20-150 |
| Chloroform                | 5.00   | 4.56          | 91  | 20-150 |
|                           |        |               |     |        |

<sup>#</sup> Column to be used to flag LCS recovery with an asterisk.

<sup>\*</sup> Values outside of QC limits.

VLCS06

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902

SAS No.:

SDG No.: 25402

Lab Sample ID: 916198

LCS Lot No.: SE115

Lab File ID:

CN016198B54.D

Date Analyzed: 10/23/98

Purge Volume: 25.0 (mL)

Dilution Factor: 1.0

| COMPOUND  | AMOUNT<br>ADDED<br>(ug/L ) | AMOUNT<br>RECOVERED<br>(ug/L ) | %REC # | QC<br>LIMITS |
|---|----------------------------|--------------------------------|--------|--------------|
| Chloromethane Ethylbenzene Toluene Vinyl Chloride | 5.00                       | 4.69                           | 94     | 20-150       |
|   | 5.00                       | 4.61                           | 92     | 20-150       |
|   | 5.00                       | 4.62                           | 92     | 20-150       |
|   | 5.00                       | 4.57                           | 91     | 20-150       |

<sup>#</sup> Column to be used to flag LCS recovery with an asterisk.
\* Values outside of QC limits.

LCS Recovery: 0 outside limits out of 34 total.

| COMMENTS: |      |      |      |      |      |
|-----------|------|------|------|------|------|
|           | <br> | <br> |      | <br> | <br> |
|           |      |      |      |      |      |
|           | <br> | <br> | <br> | <br> | <br> |

Contract: 501112 Lab Name: COMPUCHEM

VLCS39

Lab Code: COMPU Case No.: 33902 SAS No.:

SDG No.: 25402

Lab Sample ID: 915825

LCS Lot No.: SE115

Lab File ID: CN015825B54.D

Date Analyzed: 10/22/98

Purge Volume: 25.0 (mL)

Dilution Factor: 1.0

| COMPOLINE   | AMOUNT<br>ADDED                                   | AMOUNT<br>RECOVERED                                   | %DEC #   | QC   |
|---|---|---|--|--|
| COMPOUND  | _   | (ug/L)  | 1  | 1  |
| COMPOUND  1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,2-Dichloroethane Benzene Bromodichloromethane Bromoform Bromomethane Carbon Tetrachloride Carbon disulfide Chloroethane Dibromochloromethane Styrene Tetrachloroethene Trichloroethene cis-1,2-Dichloroethene cis-1,3-Dichloropropene trans-1,2-Dichloropropene | ADDED (ug/L) ==================================== | RECOVERED (ug/L) ==================================== | 100<br>106<br>91<br>108<br>103<br>87<br>92<br>94<br>87<br>106<br>97<br>96<br>105<br>90<br>81 | LIMITS ====== 20-150 20-150 20-150 20-150 20-150 20-150 20-150 20-150 20-150 20-150 20-150 20-150 20-150 20-150 20-150 |
| trans-1,2-Dichloroethene  | 5.00  | 4.48  | 90   | 20-150   |
| 1,1-Dichloroethane<br>1,1-Dichloroethene<br>1,2-Dichloropropane<br>Chlorobenzene<br>Chloroform  | 5.00<br>5.00<br>5.00<br>5.00<br>5.00              | 4.51<br>4.50<br>5.13<br>5.11<br>4.59                  | 90<br>90<br>102<br>102   | 20-150<br>20-150<br>20-150<br>20-150<br>20-150   |

<sup>#</sup> Column to be used to flag LCS recovery with an asterisk.
\* Values outside of QC limits.

Lab Name: COMPUCHEM

Contract: 501112

VLCS39

Lab Code: COMPU

Case No.: 33902

SAS No.:

SDG No.: 25402

Lab Sample ID: 915825

LCS Lot No.: SE115

Lab File ID: CN015825B54.D

Date Analyzed: 10/22/98

Purge Volume: 25.0 (mL)

Dilution Factor: 1.0

| COMPOUND  | AMOUNT<br>ADDED<br>(ug/L ) | AMOUNT<br>RECOVERED<br>(ug/L ) | %REC # | QC<br>LIMITS |
|---|----------------------------|--------------------------------|--------|--------------|
| Chloromethane Ethylbenzene Toluene Vinyl Chloride | 5.00                       | 4.54                           | 91     | 20-150       |
|   | 5.00                       | 4.88                           | 98     | 20-150       |
|   | 5.00                       | 5.18                           | 104    | 20-150       |
|   | 5.00                       | 4.51                           | 90     | 20-150       |

<sup>#</sup> Column to be used to flag LCS recovery with an asterisk.
\* Values outside of QC limits.

LCS Recovery: 0 outside limits out of 34 total.

| COMMENTS: |      |      | <br> |      |      |  |
|-----------|------|------|------|------|------|--|
|           | <br> | <br> |      | <br> | <br> |  |
|           |      |      |      |      |      |  |

VLCS70 Contract: 501112

Lab Name: COMPUCHEM

SDG No.: 25402 Lab Code: COMPU Case No.: 33902 SAS No.:

Lab Sample ID: 915061

LCS Lot No.: SE115

Lab File ID: CN015061B56.D

Date Analyzed: 10/21/98

Purge Volume: 25.0 (mL)

Dilution Factor: 1.0

|   | AMOUNT  | T'NUOMA                                 |        |        |
|---|---------|---|--------|--------|
|   | ADDED   | RECOVERED                               |        | QC     |
| COMPOUND                                | (ug/L)  | (ug/L)                                  | %REC # | LIMITS |
| ======================================= | ======= | ======================================= | =====  |        |
| 1,1,1-Trichloroethane                   | 5.00    | 5.67                                    | . –    | 20-150 |
| 1,1,2-Trichloroethane                   | 5.00    | 6.08                                    |        | 20-150 |
| 1,2-Dichloroethane                      | 5.00    | 4.95                                    | 99     | 20-150 |
| Benzene                                 | 5.00    | 5.30                                    |        | 20-150 |
| Bromodichloromethane                    | 5.00    | 5.07                                    |        | 20-150 |
| Bromoform                               | 5.00    | 5.84                                    |        | 20-150 |
| Bromomethane                            | 5.00    | 4.88                                    |        | 20-150 |
| Carbon Tetrachloride                    | 5.00    | 5.72                                    |        | 20-150 |
| Carbon disulfide                        | 5.00    | 4.74                                    |        | 20-150 |
| Chloroethane                            | 5.00    | 4.85                                    |        | 20-150 |
| Dibromochloromethane                    | 5.00    | 5.44                                    |        | 20-150 |
| Styrene                                 | 5.00    | 5.59                                    | 112    | 20-150 |
| Tetrachloroethene                       | 5.00    | 6.03                                    | 120    | 20-150 |
| Trichloroethene                         | 5.00    | 5.49                                    | 110    | 20-150 |
| cis-1,2-Dichloroethene                  | 5.00    | 4.90                                    | 98     | 20-150 |
| cis-1,3-Dichloropropene                 | 5.00    | 4.63                                    | 92     | 20-150 |
| trans-1,2-Dichloroethene                | 5.00    | 4.72                                    | 94     | 20-150 |
| trans-1,3-Dichloropropene               | 5.00    | 5.49                                    | 110    | 20-150 |
| Xylene (total)                          | 15.00   | 19.57                                   | 130    | 20-150 |
| Methylene Chloride                      | 5.00    | 4.32                                    | 86     | 20-300 |
| 2-butanone                              | 25.00   | 25.81                                   | 103    | 20-300 |
| 2-hexanone                              | 25.00   | 24.81                                   | 99     | 20-300 |
| 4-Methyl-2-pentanone                    | 25.00   | 22.34                                   | 89     | 20-300 |
| Acetone                                 | 25.00   | 21.33                                   | 85     | 20-300 |
| 1,1,2,2-Tetrachloroethane               | 5.00    | 4.96                                    | 99     | 20-150 |
| 1,1-Dichloroethane                      | 5.00    | 4.78                                    | 96     | 20-150 |
| 1,1-Dichloroethene                      | 5.00    | 4.60                                    | 92     | 20-150 |
| 1,2-Dichloropropane                     | 5.00    | 5.09                                    | 102    | 20-150 |
| Chlorobenzene                           | 5.00    | 5.78                                    | 116    | 20-150 |
| Chloroform                              | 5.00    | 6.16                                    | 123    | 20-150 |
|   |         |   |        |        |

<sup>#</sup> Column to be used to flag LCS recovery with an asterisk.
\* Values outside of QC limits.

3A

WATER VOLATILE LAB CONTROL SAMPLE RECOVERY

CLIENT SAMPLE NO.

VLCS70 Contract: 501112 Lab Name: COMPUCHEM

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25402

LCS Lot No.: SE115 Lab Sample ID: 915061

Lab File ID: CN015061B56.D Date Analyzed: 10/21/98

Dilution Factor: 1.0 Purge Volume: 25.0 (mL)

| COMPOUND  | AMOUNT<br>ADDED<br>(ug/L ) | AMOUNT<br>RECOVERED<br>(ug/L ) | %REC # | QC<br>LIMITS |
|---|----------------------------|--------------------------------|--------|--------------|
| Chloromethane Ethylbenzene Toluene Vinyl Chloride | 5.00                       | 4.98                           | 100    | 20-150       |
|   | 5.00                       | 5.78                           | 116    | 20-150       |
|   | 5.00                       | 4.76                           | 95     | 20-150       |
|   | 5.00                       | 4.86                           | 97     | 20-150       |

<sup>#</sup> Column to be used to flag LCS recovery with an asterisk.
\* Values outside of QC limits.

LCS Recovery: 0 outside limits out of 34 total.

| COMMENTS: |  |
|-----------|--|
|           |  |
|           |  |
|           |  |

VLCS87

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.:

SDG No.: 25402

Lab Sample ID: VLCS87

LCS Lot No.: SE115

Lab File ID: CN015602A56.D

Date Analyzed: 10/22/98

Purge Volume: 25.0 (mL)

Dilution Factor: 1.0

|                           | AMOUNT  | AMOUNT    |          | 1      |
|---------------------------|---------|-----------|----------|--------|
|                           | ADDED   | RECOVERED | İ        | QC     |
| COMPOUND                  | (ug/L)  | (ug/L)    | %REC #   | LIMITS |
|                           | ======= | ========= | =====    | =====  |
| 1,1,1-Trichloroethane     | 5.00    |           |          | 20-150 |
| 1,1,2-Trichloroethane     | 5.00    | 4.88      | 98       | 20-150 |
| 1,2-Dichloroethane        | 5.00    | 4.84      | 97       | 20-150 |
| Benzene                   | 5.00    | 4.99      | 100      | 20-150 |
| Bromodichloromethane      | 5.00    | 4.88      | 98       | 20-150 |
| Bromoform                 | 5.00    | 4.84      | 97       | 20-150 |
| Bromomethane              | 5.00    | 4.75      | 95       | 20-150 |
| Carbon Tetrachloride      | 5.00    | 5.11      | 102      | 20-150 |
| Carbon disulfide          | 5.00    | 4.86      | 97       | 20-150 |
| Chloroethane              | 5.00    | 4.83      | 97       | 20-150 |
| Dibromochloromethane      | 5.00    | 4.97      | 99       | 20-150 |
| Styrene                   | 5.00    | 5.17      | 103      | 20-150 |
| Tetrachloroethene         | 5.00    | 5.04      | 101      | 20-150 |
| Trichloroethene           | . 5.00  | 5.05      | 101      | 20-150 |
| cis-1,2-Dichloroethene    | 5.00    | 4.88      | 98       | 20-150 |
| cis-1,3-Dichloropropene   | 5.00    | 4.17      | 83       | 20-150 |
| trans-1,2-Dichloroethene  | 5.00    | 5.13      | 102      | 20-150 |
| trans-1,3-Dichloropropene | 5.00    | 5.07      | 101      | 20-150 |
| Xylene (total)            | 15.00   | 17.96     | 120      | 20-150 |
| Methylene Chloride        | 5.00    | 4.25      | 85       | 20-300 |
| 2-butanone                | 25.00   | 28.88     | 116      | 20-300 |
| 2-hexanone                | 25.00   | 24.87     | 99       | 20-300 |
| 4-Methyl-2-pentanone      | 25.00   | 21.07     | 84       | 20-300 |
| Acetone                   | 25.00   | 24.68     | 99       | 20-300 |
| 1,1,2,2-Tetrachloroethane | 5.00    | 4.97      | 99       | 20-150 |
| 1,1-Dichloroethane        | 5.00    | 5.03      | 100      | 20-150 |
| 1,1-Dichloroethene        | 5.00    | 4.98      | 100      | 20-150 |
| 1,2-Dichloropropane       | 5.00    | 4.81      | 96       | 20-150 |
| Chlorobenzene             | 5.00    | 5.08      | 102      | 20-150 |
| Chloroform                | 5.00    | 5.03      | 101      | 20-150 |
|                           | ·       |           | <u> </u> |        |

<sup>#</sup> Column to be used to flag LCS recovery with an asterisk.
\* Values outside of QC limits.

CLIENT SAMPLE NO.

VLCS87 Contract: 501112 Lab Name: COMPUCHEM

SDG No.: 25402 Lab Code: COMPU Case No.: 33902 SAS No.:

LCS Lot No.: SE115 Lab Sample ID: VLCS87

Lab File ID: CN015602A56.D Date Analyzed: 10/22/98

Dilution Factor: 1.0 Purge Volume: 25.0 (mL)

| COMPOUND  | AMOUNT<br>ADDED<br>(ug/L ) | AMOUNT<br>RECOVERED<br>(ug/L ) | %REC # | QC<br>LIMITS |
|---|----------------------------|--------------------------------|--------|--------------|
| Chloromethane Ethylbenzene Toluene Vinyl Chloride | 5.00                       | 4.78                           | 96     | 20-150       |
|   | 5.00                       | 5.19                           | 104    | 20-150       |
|   | 5.00                       | 4.21                           | 84     | 20-150       |
|   | 5.00                       | 4.71                           | 94     | 20-150       |

<sup>#</sup> Column to be used to flag LCS recovery with an asterisk.
\* Values outside of QC limits.

LCS Recovery: 0 outside limits out of 34 total.

| COMMENTS: |  |
|-----------|--|
|           |  |

VLCS93

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.:

SDG No.: 25402

Lab Sample ID: 915647

LCS Lot No.: SE115

Lab File ID: CN015647A54.D

Date Analyzed: 10/23/98

Purge Volume: 25.0 (mL)

Dilution Factor: 1.0

|                           | AMOUNT  | AMOUNT                                  |        |        |
|---------------------------|---------|---|--------|--------|
|                           | ADDED   | RECOVERED                               |        | QC     |
| COMPOUND                  | (ug/L)  | (ug/L )                                 | %REC # | LIMITS |
|                           | ======= | ======================================= | =====  | =====  |
| 1,1,1-Trichloroethane     | 5.00    | 4.96                                    |        | 20-150 |
| 1,1,2-Trichloroethane     | 5.00    | 5.00                                    | 1      | 20-150 |
| 1,2-Dichloroethane        | 5.00    | 4.66                                    | 93     | 20-150 |
| Benzene                   | 5.00    | 5.18                                    | 104    | 20-150 |
| Bromodichloromethane      | 5.00    | 5.01                                    |        | 20-150 |
| Bromoform                 | 5.00    | 5.07                                    |        | 20-150 |
| Bromomethane              | 5.00    | 5.24                                    | 105    | 20-150 |
| Carbon Tetrachloride      | 5.00    | 4.93                                    | 98     | 20-150 |
| Carbon disulfide          | 5.00    | 5.32                                    | 106    | 20-150 |
| Chloroethane              | 5.00    | 5.38                                    | 108    | 20-150 |
| Dibromochloromethane      | 5.00    | 5.15                                    | 103    | 20-150 |
| Styrene                   | 5.00    | 5.20                                    | 104    | 20-150 |
| Tetrachloroethene         | 5.00    | 5.27                                    | 105    | 20-150 |
| Trichloroethene           | 5.00    | 5.13                                    | 103    | 20-150 |
| cis-1,2-Dichloroethene    | 5.00    | 5.34                                    | 107    | 20-150 |
| cis-1,3-Dichloropropene   | 5.00    | 5.58                                    | 112    | 20-150 |
| trans-1,2-Dichloroethene  | 5.00    | 5.30                                    | 106    | 20-150 |
| trans-1,3-Dichloropropene | 5.00    | 5.47                                    | 110    | 20-150 |
| Xylene (total)            | 15.00   | 16.39                                   | 109    | 20-150 |
| Methylene Chloride        | 5.00    | 5.55                                    | 111    | 20-300 |
| 2-butanone                | 25.00   | 26.02                                   | 104    | 20-300 |
| 2-hexanone                | 25.00   | 29.12                                   | 116    | 20-300 |
| 4-Methyl-2-pentanone      | 25.00   | 29.87                                   | 119    | 20-300 |
| Acetone                   | 25.00   | 28.21                                   | 113    | 20-300 |
| 1,1,2,2-Tetrachloroethane | 5.00    | 4.94                                    | 99     | 20-150 |
| 1,1-Dichloroethane        | 5.00    | 5.27                                    | 105    | 20-150 |
| 1,1-Dichloroethene        | 5.00    | 5.27                                    |        | 20-150 |
| 1,2-Dichloropropane       | 5.00    | 5.13                                    | I      | 20-150 |
| Chlorobenzene             | 5.00    | 5.03                                    | I      | 20-150 |
| Chloroform                | 5.00    | 4.83                                    | 97     | 20-150 |
|                           | l.      | l.                                      |        |        |

<sup>#</sup> Column to be used to flag LCS recovery with an asterisk.
\* Values outside of QC limits.

CLIENT SAMPLE NO.

WATER VOLATILE LAB CONTROL SAMPLE RECOVERY

VLCS93

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.:

SDG No.: 25402

Lab Sample ID: 915647

LCS Lot No.: SE115

Lab File ID: CN015647A54.D

Date Analyzed: 10/23/98

Purge Volume: 25.0 (mL)

Dilution Factor: 1.0

| COMPOUND  | AMOUNT<br>ADDED<br>(ug/L ) | AMOUNT<br>RECOVERED<br>(ug/L ) | %REC # | QC<br>LIMITS |
|---|----------------------------|--------------------------------|--------|--------------|
| Chloromethane Ethylbenzene Toluene Vinyl Chloride | 5.00                       | 4.94                           | 99     | 20-150       |
|   | 5.00                       | 5.23                           | 105    | 20-150       |
|   | 5.00                       | 5.53                           | 110    | 20-150       |
|   | 5.00                       | 4.98                           | 100    | 20-150       |

<sup>#</sup> Column to be used to flag LCS recovery with an asterisk.
\* Values outside of QC limits.

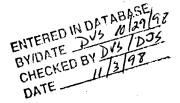
LCS Recovery: 0 outside limits out of 34 total.

| COMMENTS: |       |
|-----------|-------|
|           | <br>_ |
|           |       |
|           |       |
|           | _     |

Rec'd 10/29/98

a division of Liberty Analytical Corp.

EPA Region 5 Records Ctr.



28/OCT/98

LEGGETTE BRASHEARS & GRAHAM ATTN: MR. KEN VOGEL 1210 WEST COUNTY Rd. E, STE700 ST. PAUL, MN 55112

Subject: Report of Data - Account Number# 501112 Order# 33902

ATTN: MR. KEN VOGEL

Enclosed are the results of analytical work performed in accordance with the referenced account number.

This report covers 7 sample(s) appearing on the attached listing.

Thank you for selecting CompuChem Environmental for your sample analysis. If you should have questions or require additional analytical services please contact your representative at 1-800-833-5097.

Sincerely,

CompuChem Environmental

a division of Liberty Analytical

Attachment

a division of Liberty Analytical Corp.

### 28/OCT/98

LEGGETTE BRASHEARS & GRAHAM ATTN: MR. KEN VOGEL

1210 WEST COUNTY Rd. E, STE700

ST. PAUL, MN 55112

### ACCOUNT #: 501112

| 10/17/98 |
|----------|
| 10/17/98 |
| 10/17/98 |
| 10/17/98 |
| 10/17/98 |
| 10/17/98 |
| 10/17/98 |
|          |

TOTAL NUMBER OF SAMPLES = 7

CompuChem a Division of Liberty Analytical 501 N. Madison Avenue Cary, NC 27513

> SDG NARRATIVE CASE:33902 SDG:25403 CONTRACT:501112

SAMPLE IDENTIFICATIONS: SPARGEH2O PZ-17D PZ-17I PZ-15I MWA-1 MWA-4 MW-20S

The seven(7) water samples listed above were received intact, properly refrigerated, with proper chain of custody(COC) documentation on October 17,1998. The samples were prepared and analyzed following SW846 method 8260 25ml purge. All of these samples were submitted for volatile only analysis.

#### **VOLATILES:**

Analysis holding time requirements were met for these samples. The majority of samples contained one or more of the target analytes 1,1,1-trichloroethane, trichloroethene, tetrachloroethene, 1,1-dichloroethane and cis-1,2-dichloroethene.

Samples MWA-1, MWA-4, PZ-15I, PZ-17D and PZ-17I, were all analyzed at dilutions, to bring one or more of these analytes into calibration range.

Sample PZ-17D was originally analyzed neat and trichloroethene, tetrachloroethene and cis-1,2-dichloroethene exceeded the calibration range. A reanalysis at a 17:1 dilution brought these analytes into range. We are reporting both analyses so that no TCL data would be lost due to dilution.

No Tentatively Identified Compound (TIC) data is provided as requested by the client.

All of the surrogates met recovery criteria and all of the internal standards met response and retention time criteria in the analyses of these samples.

The associated method blanks met all quality control criteria and all contained methylene chloride and acetone below the reporting limit.

The associated Laboratory Control Samples (LCS's) met all QC acceptance limits.

The duplicate matrix spikes generated from MW-20S met all QC precision and accuracy criteria with one exception. The spike compound trichloroethene exceeded the advisory RPD limits.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions listed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Roy M. Sutton

Development Chemist October 28, 1998

Length

## GC and GC/MS Column and Trap Specifications Table

## **COLUMNS**

Coating

**Brand Name** 

| L          | Material        | (mm)        | (um) | (m) |
|------------|-----------------|-------------|------|-----|
| GC Laborat | ory             | <del></del> |      |     |
| Restek     | RTX-1701        | 0.53        | 0.5  | 30  |
| J & W      | DB-608          | 0.53        | 0.83 | 30  |
| Restek     | CLPesticides    | 0.53        | 0.5  | 30  |
| Restek     | CLPesticides II | 0.53        | 0.42 | 30  |

| GC/MS Vola | tiles Laboratory |      |     |       |
|------------|------------------|------|-----|-------|
| J & W      | DB-624           | 0.53 | 3.0 | 30/75 |
| Supelco    | SPB-624          | 0.53 | 3.0 | 75    |

| GC/MS Semivolatiles Laboratory |        |      |      |    |
|--------------------------------|--------|------|------|----|
| J & W                          | DB-5   | 0.32 | 1.0  | 30 |
| Hewlett Packard                | HP5-MS | 0.25 | 0.25 | 30 |

### **TRAP**

| GC/MS Volatiles Laboratory |   |  |
|----------------------------|---|--|
|                            | * 15 cm of 2,6-diphenylene oxide polymer (Tenax) * 1 cm of methyl silicone packing (OV-1 coating) * 8 cm of silica gel * 0.5 cm of glass wool at each end |  |

## Notification Regarding Manual Editing/Integration Flags

In some instances, manual adjustments to the software output are necessary to provide accurate data. These adjustments are performed by the data reviewer, GC/MS operator, or GC chemist. An Extracted Ion Current Profile (EICP) or a GC chromatographic peak has been provided for the manual integration of each compound to demonstrate the accuracy of that process. Adjustments are flagged on the quantitation report in the far right column beyond the FINAL concentration for GC/MS analysis, and in the "Flags" column for GC analysis. The manual editing/integration flags are:

- Denotes that a manual integration has been performed for this compound. The manual integration was performed in order to provide the most accurate area count as possible for the peak.
- H Denotes that the data reviewer, GC/MS operator, or GC Chemist has chosen an alternate peak within the retention time window from that chosen by the software for that compound. No manual integration is performed in choosing an alternate peak. The software still performs the integration.
- MH Denotes that an alternate peak has been chosen within the retention time window from that chosen by the software for that compound and also a manual integration of the chosen peak has been performed. The manual integration was performed in order to provide the most accurate area count possible for the peak.
- L Denotes that the data reviewer or GC/MS operator has selected an alternate library search. This is typically done when an additional tentatively identified compound (TIC) has been added to the number of peaks searched. No manual integration is performed in choosing an alternate peak. The software still performs the integration.
- Denotes that an alternate library search has been selected and a manual integration has also been performed. This is typically done when an additional TIC has been added and the TIC peak also required a manual integration.

With the introduction of the current EPA CLP SOW (Document Number OLM03.0, plus revisions) additional explanations for manual editing/integration are required. In the accompanying raw data packages, additional codes have been applied to the "M" flag and carry the following meanings;

- The compound was not found by the automatic integration routine.
- M2 The compound was incorrectly integrated by the automatic integration routine.
- M3 The co-eluting compounds were incorrectly integrated by the automatic integration routine.

These codes will appear in the GC/MS and GC data packages.

Robert E. Meierer

Vice President

### DATA REPORTING QUALIFIERS

On the Form I, under the column labeled "Q" for qualifier, each result is flagged with the specific data reporting qualifiers listed below, as appropriate. Up to five qualifiers may be reported on Form I for each compound. The qualifiers used are:

- U: This flag indicates the compound was analyzed for but not detected. The Contract Required Quantitation Limit (CRQL) (or Reporting Limit) will be adjusted to reflect any dilution and, for soils, the percent moisture.
- J: This flag indicates an estimated value. The flag is used as detailed below:
  - 1. When estimating a concentration for tentatively identified compounds (TICs) where a response factor of 1.0 is assumed for the TIC analyte,
  - 2. When the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the CRQL (or Reporting Limit) but greater than zero, and
  - 3. When the retention time data indicates the presence of a compound that meets the pesticide/Aroclor or other GC or HPLC identification criteria, and the result is less than the CRQL (or Reporting Limit) but greater than zero. For example, if the CRQL (or Reporting Limit) is 10 µg/L, but a concentration of 3 µg/L is calculated, it is reported as 3J.
- N: This flag indicates presumptive evidence of a compound. This flag is only used for TICs, where the identification is based on a mass spectral library search. For generic characterization of a TIC such as 'chlorinated hydrocarbon', the N flag is not used.
- P: In the EPA's Contract Laboratory Program (CLP), this flag is used for a pesticide/Aroclor target analyte, when there is greater than 25% difference for detected concentrations between the two GC columns. The <u>lower</u> of the two values is reported on Form I and flagged with a P. For SW-846 GC and HPLC analyses, when the Relative Percent Difference (RPD) is greater than 40% and there is no evidence of chromatographic anomalies or interferences, then the <u>higher</u> of the two values is reported and flagged with a P. When the RPD is equal to or less than 40%, our policy is to also report the <u>higher</u> of the two values, although the choice could be a project specific issue.
- C: This flag applies to GC or HPLC results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, this flag is not applied; a laboratory-defined flag is used instead (see the X/Y/Z qualifier.)

### DATA REPORTING QUALIFIERS (continued)

- B: This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates probable blank contamination and warns the data user to take appropriate action. This flag is used for a TIC as well as for a positively identified target compound. The combination of flags BU or UB is not an allowable policy. Blank contaminants are flagged B only when they are detected in the sample.
- E: This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis. If one or more compounds have a response greater than the upper level of the calibration range, the sample or extract will be diluted and reanalyzed. All such compounds with a response greater than the upper level of the calibration range will have the concentration flagged with an E on Form I for the original analysis.
- D: If a sample or extract is reanalyzed at a higher dilution factor, for example when the concentration of an analyte exceeds the upper calibration range, the DL suffix is appended to the sample number on Form I for the more diluted sample, and all reported concentrations on that Form I are flagged with the D flag. This flag alerts data users that any discrepancies between the reported concentrations may be due to dilution of the sample or extract.
- NOTE 1: The D flag is not applied to compounds which are not detected in the sample analysis i.e. compounds reported with the CRQL (or Reporting Limit) and the U flag.
- NOTE 2: Separate Form Is are used for reporting the original analysis (Client Sample No. XXXXX) and the more diluted sample analysis (Client Sample No. XXXXXDL) i.e. the results from both analyses are not combined on a single Form I.
- A: This flag indicates that a TIC is a suspected aldol-condensation product.
- S: This flag indicates that an analyte was detected by a single column GC analysis but the result was below the Reporting Limit. This flag is only used when clients request a second (confirmation) column analysis after detecting an analyte above the Reporting Limit in the initial, single column analysis. This flag alerts the data user that only an analyte was detected below the Reporting Limit and a second (confirmation) analysis was not performed.
- X/Y/Z: Other specific flags may be required to properly define the results. If used, the flags will be fully described in the SDG Narrative. The laboratory-defined flags are limited to X, Y and Z.

| 24 calendar hrs. Chr<br>48 <u>calendar</u> hrs. Chr   |                 | Project :<br>Site Lo<br>Site | /Łh Q<br>Name: _<br>cation: _                      | vivle         | r GWS.<br>AYTUN | inpling.   | AL PROD                              |             |               |          |              |           |                 |  |                            |             |
|---|-----------------|------------------------------|--|---------------|-----------------|--|--------------------------------------|-------------|---------------|----------|--------------|-----------|-----------------|--|----------------------------|-------------|
| 01 Madison Avenue  Cary, NC 27513  Phone Number: 1-800-833-5097  Fax Number: (919) 379-4050  Furn-around Time Request: 24 calendar hrs. Chr. 148 calendar hrs. Chr. |                 | Site Lo                      | Name: _<br>cation: _                               | _D            | AYTON           | TUELOM   | 11 2036                              |             |               |          |              |           |                 |  |                            | 40          |
| Cary. NC 27513  Phone Number: 1-800-833-5097  Fax Number: (919) 379-4050  Furn-around Time Request: 24 calendar hrs. Chr. 148 calendar hrs. Chr.                    |                 | Site                         | cation: _  |               |                 | THEIN  | ME TRUP                              | Con         | nsultant:     | 1840     | e H.         | 2         | Br              | ashe   | 1911 61-14:00 ,3           | Inc.        |
| hone Number: 1-800-833-5097 ax Number: (919) 379-4050  Furn-around Time Request: 4 calendar hrs. 6 calendar hrs. 7 Chr  |                 |                              |  |               | vron C          | H  |                                      | ] /         | Address:      | 12/31    | W.           | <i>C.</i> | ) 1             | E.J.   | E                          |             |
| ax Number: (919) 379-4050  urn-around Time Request: 4 calendar hrs. Chr 8 calendar hrs. Chr   |                 |                              | Code:  | SZ            |                 |  |                                      | ]           |               | St Pc.   | uT.          | M         | 1.              | 5511   | 12_                        |             |
| urn-around Time Request: 4 calendar hrs. Chr 8 calendar hrs. Chr  |                 | RFA N                        | umber:   | 490           | 78003           | 54-T   |                                      | Consu       | ultant PM:    | 1.0      | lagi         | 7         |                 |  |                            |             |
| 4 calendar hrs. Chr<br>8 calendar hrs. Chr  |                 | Chrysl                       | er PM:   | Gan           | Stancz          | UK   |                                      | ]           |               | 1-49     | 150          | 401       |                 | Fax:   | 651-490-1006               |             |
| 8 <u>calendar</u> hrs. Chr  |                 | Deliverabl                   | les: (circ   | ik)           |                 | ompound Lis                                      | -Parameter/Meth                      | od/Bottle   | Type/Preser   | rative   |              |           | ·               |  | Matrix Codes               |             |
|   | rysler Level    |                              | ·  |               |                 | 1  |                                      |             |               |          | 1            | Soil      |                 |  | SW - Surface Water         |             |
| · )   | rysler Level    |                              |  |               |                 |  | 1 1                                  |             | 1 1           | 1        | 77           |           |                 | water  | A - Air                    |             |
|   | her (specify)   | ):                           |  |               |                 | 1  | 1 1                                  | 1           | 1             | 1        |              |           | edime           |  |                            |             |
| days  |                 |                              |  |               |                 | 1  | 1                                    | 1           | } }           | }        | _            |           |                 | ocify)   |                            |             |
|   |                 | ·····                        | —т   | - 1           |                 | ļ ļ  | 1                                    | 1           |               | - 1      | 14           | ab U      | e On            | 9  |                            |             |
| į.  |                 |                              | . !  |               | <u> </u>        | ļ ļ  |                                      |             |               |          | į            |           |                 | 1  |                            |             |
|   | ŀ               |                              | <u></u>  | - 1           | C   \$ in       | l l  | l l                                  | -           | ļ ļ           | 1        | 4            | 7         | × 12            |  |                            |             |
|   |                 |                              |  | 월             | ઇ   🤏           | [  |                                      |             |               | l        | 핗            | ¥         | 볓               | H  |                            |             |
| <u> </u>  | ] ·             |                              | © 8  | ડું           | \$ 2            |  |                                      | -           |               |          | 1            | 7         | 8               |  | ·                          |             |
|   | Dute            | Time                         | Orab (G) or<br>Composite (C)                       | Matrix Code   | Total           | 1 1  | 1 1                                  | }           | 1 1           | }        | Volatiles pH | Metab pH  | 1               | الأ  | •                          |             |
|   | Collected       | Collected                    |  |               |                 |  |                                      | 1           |               |          | \            | . ≥       | Ö               | <u> </u>   | Remarks                    |             |
| E 10/1998-1 10  | 0/14/96         | 8:30                         | G 9  | jw            | 3 X             |  |                                      |             | 1             |          |              |           |                 | 2  | quipment Blank             |             |
| MWE-  |                 | 8:40                         |  |               | 3 ×             |  |                                      |             |               |          |              |           | $\lceil \rceil$ |  |                            |             |
| MWB-1   |                 | 8:50                         |  |               | 3 X             |  |                                      |             |               |          |              |           |                 |  |                            |             |
| FZ-22I  |                 | 9:05                         |  |               | 7 1             | <del>                                     </del> |                                      | _           |               |          |              | +         | $\dagger$       |  |                            |             |
| MWB 9   | 1               | 9:40                         |  |               | 7 2             | <del>                                     </del> |                                      | +           | +             |          | _            | +         | +               |  |                            |             |
| PZ-21I  | 1-1             | 9,50                         | 1  |               | 3 X             | <del> </del>                                     |                                      | <del></del> | +             |          | _            | +         |                 |  |                            |             |
| MW - 195  | 1-1             | 10:10                        | +-   |               | $\frac{3}{3}$   | <del>                                     </del> |                                      | +-          | +             | -+       |              | ╁         | ╁┈              |  |                            |             |
| 12-19I  | +               | 10:20                        | <del>    -   -   -   -   -   -   -   -   -  </del> |               | 2 1             | ++-  | +                                    | +           | +             |          | -+           | +         | +-              | <del>                                     </del> |                            |             |
| PZ-20D  | 1               | 10:50                        | +  | ╁╌╂╵          | 3 X             | ++-  | <del></del>                          |             | +             | -+-      | -+           | +-        | +-              | <del>                                     </del> |                            |             |
| MW-185  |                 | 11:04                        | 1  | 1             | ₹ <del>`</del>  | ++-  | <del></del>                          |             | ++            |          |              | +         | +-              | ++-  |                            | <del></del> |
| sampler(s) a  | Sottles Reliqui |                              | Irbill No.   | $-\mathbf{v}$ | 7 49577         | 498  | Samples Relinqu                      | ished under | Airbill No. 2 | 2020     | 145          | 7         | 47              | 3 To   | experature (corrected) 4.4 | 10/17       |
|   |                 |                              |  |               | Date:           | Time:  | Received by:                         |             |               | / De     | , , , ,      | $\neg$    | <br>Ime:        | ~  | estedy Soul Intact?        | <u>A</u>    |
| 7   | Some            | We V-                        | via  | 11            | 10/15/48        |  | 1 //                                 | 1.          | S00/          | <b>4</b> | o -/6 ?      | - 1       | 12L             | 1  | Yes No                     |             |
|   | Rollinguished b |                              | 700  | · L           | Date:           | Time:  | Received by:                         | <u> </u>    | 000/          | De       |              | 4         |                 | C  | natady Sani Intact?        |             |
| Cooler ID# 402  |                 |                              |  |               |                 |  |                                      |             |               | "        |              |           |                 |  | Yes No                     |             |
| ı   | Relinquished b  | by:                          |  |               | Date:           | Time:  | Received for La                      | borelary by | M             | D.       | te:/         | / 1       | ime:            | Cı   | ustedy Seel Intact?        |             |
| No .  |                 |                              |  |               | <u> </u>        |  | HA                                   | UZ          | Musi          |          | 7 '//.       | 20        | 10:9            | 1gen   | Yes No                     |             |
|   |                 |                              |  |               |                 |  | MS 482-00-51, Au<br>atory Pink: Reta |             |               | 8326-275 | 7            |           |                 |  | <u>~</u>                   |             |

Revision No. 1

Storage ID 4 DE 11:30ar Samples intact

2/01/2

| CHRYSL<br>CORPOR                               | ER       |                   |                   |                              |             |                       |               |           |          |           |             | Chai         | in-of      | f-Cu        | stod     | ly           |           |          | 1         | 03733 A                              |
|--|----------|-------------------|-------------------|------------------------------|-------------|-----------------------|---------------|-----------|----------|-----------|-------------|--------------|------------|-------------|----------|--------------|-----------|----------|-----------|--------------------------------------|
| CORPOR   | TAS      | 101               | N                 | 4H (                         | Rucur       | ter                   | 6w5<br>The    | moli      | <u> </u> |           |             |              |            |             | <u>.</u> |              |           |          |           |                                      |
| puChem   |          |                   | Project           | Name:                        | Driy        | to:                   | The           | 201       | Pisa     | ucts      |             |              | sultant:   | Lags        | He       | Br           | ~ · · · · | heve     | ., {      | Braham Inc. I                        |
| Madison Avenue                                 |          |                   | Site Lo           | cation:                      | <u> 141</u> | Ytu                   | n OF          | Ĺ         |          |           |             | Α            | .ddress: _ | 1270        | W. 1     | <u>CO.</u>   |           | cl       | E'        |                                      |
| : NC 27513                                     |          |                   |                   | Code:                        |             |                       |               |           |          |           |             |              | _          | 5t. 6       | aul.     | M            | N         |          | 7//       | 2_                                   |
| ne Number: 1-800-833-5097                      |          |                   | RFA N             | umber:                       |             |                       | 8002          |           | <u>-</u> |           |             | Consul       | tant PM:   | Ken         | Vac      | ie [         |           |          |           |                                      |
| Number: (919) 379-4050                         | To       | بلب               |                   | er PM:                       | _60         | wy .                  | كالصدح        | <u>کر</u> |          |           |             |              |            | 651-4       |          | 140          | <u></u>   |          | Fa        | x: 651-490-1006                      |
| n-around Time Request:<br>alendar hrs.         |          | ackage<br>a Level | Deliverab         | les: (cir                    | cle)        | 0                     |               | ompour    | d List-P | arameter  | Method.     | Bottle 1     | Type/Pre   | servative   |          |              |           |          |           | Matrix Codes<br>SW - Surface Water   |
| alendar rus.<br>alendar hrs.                   | <u> </u> | z Level           |                   |                              |             |                       | 1             |           |          | 1         | ì           |              | ľ          | 1           |          | S - S        |           | ~        | . we free | 1                                    |
|  | 1 -      | specify):         |                   |                              |             |                       | ) l           |           |          | 1         | Ì           |              |            | Ì           |          | Sed.         |           |          |           |                                      |
| lays   | <u> </u> |                   |                   |                              |             |                       | ] ]           |           |          | ] ]       | 1           |              |            | l           |          | 0-0          |           |          |           | )                                    |
|  |          |                   |                   |                              |             |                       | ] [           |           |          | l l       |             | 1            | ,          |             |          | Lal          | Us        | e On     | 4         |                                      |
|  | l        |                   | ŀ                 |                              |             | 6                     |               |           | ļ        |           |             |              |            |             |          |              |           |          |           |                                      |
|  | 1        |                   | }                 |                              | 1           | ] · [2]               |               |           |          | }         |             |              |            |             |          | 9            | ~1        | #        | ٦         |                                      |
|  | 1        |                   | Ì                 | ري 🖈                         | မွ          | 3                     | ec            |           | ·        |           | ŀ           |              |            |             |          | H            | ¥         | Ä        |           |                                      |
|  | 1        |                   |                   | Signal Co                    | දී          | ig i                  | 30            |           |          | \         |             |              |            |             |          | Ī            | <b>E</b>  | te pH    | -   ]     |                                      |
|  | Dat      |                   | Time              | Grab (G) or<br>Composite (C) | Matrix Code | Total # of Containers | 100           |           |          | )         | ) i         |              |            | 1           |          | Volutiles pH | Metals pH | Cynamid  | 4         |                                      |
| Field Sample Identification                    | Collec   |                   | Collected         |                              |             |                       | ا ــــا       |           | <b></b>  | ļ         | <u> </u>    |              | ļ          |             |          | 18           | Ž         | <u>5</u> | 링         | Remarks                              |
| MWayB-2  | iolit    | 198               | 11.30             | 6                            | FW.         | 3                     | X             |           |          |           |             |              | <u></u>    |             | _        |              |           |          |           |                                      |
| MWC-2  | ]        | /                 | 11:45             |                              |             | 3                     | X             |           |          |           |             |              |            |             |          |              |           |          |           |                                      |
| MW-75  |          | /                 | 3:00              |                              |             | 3                     | X             |           |          |           |             |              |            |             |          |              |           |          |           |                                      |
| FZ- 7I   |          | /                 | 13:10             |                              |             | 3                     | X             |           |          |           |             |              |            |             |          |              |           |          |           |                                      |
| MWB-5  |          |                   | 13:20             |                              | $\prod$     | 3                     | X             |           |          |           |             |              |            |             |          |              |           |          |           |                                      |
| MWA-5  |          |                   | 13:30             | $T^{-}$                      | П           | 3                     | X             |           |          |           |             |              |            |             |          |              |           |          |           |                                      |
| MWA-6  |          |                   | 13:55             |                              |             | 13                    |               |           |          |           |             |              |            |             |          | T            |           |          |           |                                      |
| FZ-13I   |          |                   | 13:40             |                              | $\prod$     | 3                     | X             |           |          |           |             |              |            |             |          |              |           |          |           |                                      |
| MWA-6 Dup                                      |          |                   | 13:56             |                              | $\prod$     | 3                     | X             |           |          |           |             |              |            |             |          |              |           |          |           |                                      |
| Trip Blan Kic 1498                             | V        |                   |                   | V                            | V           | 2                     | X             |           |          |           |             |              |            |             |          |              | T         |          |           | onené Ge                             |
| mpler(s)                                       | Bottles  | Reliquis          | hed under A       | irbili No.                   | 42          | 87                    | 4957          | 749       | 7        | Samples   | Relinquist  | ed under     | Airbill No | 807         | 49       | 53           | 4         | 73       |           | Temperature (corrected) 4.0 C 10.400 |
| mpler(s).<br>Unil Pregall                      | Reljag   | nished by         |                   |                              |             | Date                  | ĸ _           | Time:     |          | Received  | i byy       |              |            | . /         | Date:    |              | 1         | -        | 1         | Custody Seul Intact?                 |
|  | 1/0      | mil               | 26                | rese                         | eUV         | 10                    | 115198        | 1         |          | بربرا     | Sele        | ر بر         | Too t      | <b>%</b>    | 10-16    | 5-5 8        | 1/        | 21       | 3         | Yes No                               |
|  |          | uished by         | -                 |                              | Z Z         | Det                   | <del></del>   | Time      |          | Receive   | A L         |              |            |             | Date     |              | 71        |          |           | Custody Seel Intect?                 |
| ooler ID # 402                                 | ·····    |                   |                   |                              |             |                       |               |           |          |           |             |              |            |             |          |              | 1         |          |           | Yes No                               |
|  | D-U      |                   |                   |                              |             | -                     |               | Time:     |          | 1.        |             |              |            |             | 1        |              | +         |          |           | Custody Seel Intact?                 |
| RFA sampling complete?                         | Kenned   | juiched by        | ji                |                              |             | Det                   | e:            | 11856:    |          |           | d for Labor | F//)         | 410        | 0           | Date:    | 7/98         | .         |          | Gar.      | 1•                                   |
|  |          | <del>-</del>      | Ch                | rysler C                     | orpore      | ztion                 | 800 Chrys     | ler Driv  | e, CIM   | S 482-00- | 51, Aubu    | rn Hills,    | Michigo    | an 48326    |          | 411          | _1/_      | <u> </u> | 7.47      |                                      |
|  | Distri   | ibution:          | White cop         |                              |             |                       |               |           |          |           |             | <del></del>  |            |             |          |              |           |          |           |                                      |
|  |          | 1                 |                   | ,                            |             | , .                   | -             | /         |          |           |             | 2/c          | ہک         | eale        | 4        |              | ,         |          |           |                                      |
| < ^  |          | ת חלים            | $\frac{1}{2}$     | 11/1                         | r d         | w                     | رحی ر         | na        | 90       |           | -           | $\leftarrow$ | 1          | ,           | _/_      | -/           |           |          |           |                                      |
| $\rightarrow a$                                | W        | ررس               | $\mathcal{L}^{u}$ | ملاس عمد                     | ~           |                       | - 6           |           | 1        |           | _           | رسە          | jul        | o ci        | 4/0      | ر<br>م       |           |          |           | _                                    |
| Sa<br>Revision No. 1                           | /        | ,                 | カ                 | 4                            | 7           | )3                    | 10/17/9       | ں جو      | - car    | `         |             |              | ,<br>, , , | s u<br>leng | ~ /      | , 0          |           |          |           | Page 2 of 2                          |
| Revision No. 1<br>County L. September 23, 1997 |          | /                 | ン                 | /                            | •           |                       | · · / · · / · | 11'       | <b>7</b> |           | ţ           | 0010         | 1          |             | 7        |              |           | ~        |           |                                      |

Revision No. 1 Created September 23, 1997.

| CHRYSLI  | ER                 |                 |                          |              |             |                  |              |  |              |                | Cha            | in-of            | -Cu           | stod                   | ly                      |                           | - }        | 03734 A                             |
|--|--------------------|-----------------|--------------------------|--------------|-------------|------------------|--------------|--|--------------|----------------|----------------|------------------|---------------|------------------------|-------------------------|---------------------------|------------|-------------------------------------|
| CORPOR   | RATIC              | MC              | 4                        | 14           | Qtr         | رنه.             | Sim          | pling  |              |                |                |                  | <del>.</del>  |                        | <u> </u>                |                           |            |                                     |
| ompuChem   |                    | Ртојес          | Name:                    | Dr. y        | bu          | Theim            | el f         | roclaci  | 4            |                | Cor            | sultant:         | Leigne        | He.                    | Box                     | she                       | ars        | Conhan, Inc                         |
| )   Madison Avenue                                       |                    | Site L          | ocation.                 | Pa           | Iton        | OH               |              |  |              |                | A              | ddress:          | 12/0          |                        | ر م                     | Rel.                      | E          | <u> </u>                            |
| ary, NC 27513  |                    | 1               | e Code:                  |              | SCO         |                  |              |  |              |                |                | _                |               |                        | MN                      | 25                        | 112        | <u>*</u>                            |
| none Number: 1-800-833-5097<br>ax Number: (919) 379-4050 |                    | 1               | Number:<br>sier PM:      |              |             | P 98             |              |  |              |                | Consul         | tant PM:         |               | Voce                   |                         |                           |            | and Was Hor                         |
| urn-around Time Request:                                 | Data Packs         | ge Deliverat    |                          |              | yary        |                  | EZ.U         |  | rameta       | e/Metho        | d/Doddle       | Phone: Type/Pres | <u> 551-4</u> |                        | 467                     |                           | 1          | ex: GSI - YGU - MOT<br>Matrix Codes |
| 4 calendar hrs.  | Chrysler Le        | vel 1           | -1021 (022               | -1.0,        | ŀ           | Ť                |              |  |              | 1/MICUIO       | Dorte          | i ypez i ta      | et vauve      |                        | S - So                  | oil                       |            | SW - Surface Water                  |
| B calendar hrs.  D days                                  | Chrysler Le        |                 |                          |              | 1           | 1                |              |  |              |                |                |                  |               |                        |                         |                           | nd wate    | ar A-Air                            |
| 0 days   | Other (speci       | ify):           |                          |              |             | 1                |              |  |              |                |                |                  | 1             |                        | Sed<br>O - O            |                           |            | A                                   |
| ) days   | <del></del>        |                 |                          |              |             |                  |              |  |              |                |                |                  |               |                        |                         | Use (                     | _          | <u> </u>                            |
|  |                    |                 |                          | $\Gamma$     | F           | }                |              |  |              | 1              |                |                  | }             |                        | }                       |                           | 1          |                                     |
|  |                    |                 |                          |              | iğ i        | 0                |              |  |              |                |                |                  | }             |                        | l                       | 2                         | J          |                                     |
|  | 1                  | į               | )                        | 1 8          | of Containe | 3                | •            | }  |              |                |                | 1                |               |                        | ¥ 3                     | 7 × ×                     | - 11       |                                     |
|  | 1                  | 1               | (a)                      | 3            | Jo #        | 8                |              | <b>}</b>   | •            |                |                |                  | 1             |                        | E,                      | 4 P                       | ١)         |                                     |
| milio 1 Id. attenden                                     | Date               | Time            | Grab (G) or<br>Composite | Matrix       | Total       | ~3               |              | }  | }            | Ì              |                |                  |               |                        | Volatiles pH            | Metals pH A<br>Cyanide pH | . ag       | <b>5</b>                            |
| Field Sample Identification                              | Collected<br>      | Collected ?     | 60                       |              | 3           |                  |              |  | }            | <del>├</del>   | }              |                  |               | L                      | <u>&gt;</u>             | <del>Σ</del> Ο            | -          | Remarks                             |
|  | 1011111            | 14:10           | 66                       | <del> </del> | 13          |                  |              | <del> </del>                                     | <del> </del> | ╂              | <u> </u>       | <del>  </del>    |               |                        | ╁╌┼                     | +                         | ╁┩         |                                     |
| PZ - 12D   | +                  |                 | <del> -  </del>          | ╁╂╌          | 12          | $ \mathcal{X} $  |              | <del> </del> -                                   | <del> </del> | <del> </del> - | <del> </del>   |                  |               |                        | ++                      |                           | +          |                                     |
| MW-155   | ++                 | 14:50           | ┼-┼                      | ╁╁╴          | 2           | <del>V</del>     |              | <b> </b>   | <del> </del> | <del> </del> - | <del> </del> - | <u> </u>         |               |                        | $\frac{1}{1}$           |                           | +          | 40 10 10                            |
| E10 1498-2   | +                  | <del></del>     | ┼┼                       | +-           |             | ->-              |              | <del>                                     </del> | 1            | <del> </del>   | ļ              | ļ                | 1.3           |                        | +-+                     |                           | $\bot$     | On bottle 12-15I                    |
| MW-15I *   | ┧-}                | 15:01           | ╁-╁                      | 44           | 2           | X                |              | Silo   | 4101         | god .          | 12-1           | Ig               | 10114         | Done                   | ting                    | ado)                      | iba        | 15.01                               |
| MW-11S   |                    | 15:15           | 1-                       | 11           | 2           | LX.              |              | <del> </del>                                     | <del> </del> | ļ              | <u> </u>       | <u> </u>         | ļ             |                        | $\downarrow \downarrow$ | _                         |            |                                     |
| MW-115 Dup   | <del>-   -  </del> | 15:16           | ++-                      | 44           | 2           | X                | <u> </u>     | <b></b>  | <u> </u>     | <u> </u>       | <del>  </del>  | <u> </u>         | ļ             | ļ                      | 44                      |                           | _          |                                     |
| MWB-3  |                    | 15:30           |                          | 11           | 2           | X                |              | <del> </del>                                     | ļ            | <del> </del>   | <u> </u>       | ļ                | ļ             | <u> </u>               | 1                       |                           | $\perp$    |                                     |
| MWC-3  |                    | 15:40           | 1                        | 44           | 2           | LX,              |              | <u> </u>   | <u> </u>     | ļ              |                |                  | <u> </u>      |                        | 44                      |                           |            |                                     |
| MWA-3  | V                  | 16:00           | TA                       | V            | 2           | $\perp$ $\times$ | <u> </u>     | <u> </u>   |              | _}             |                |                  | <u> </u>      | <u> </u>               |                         |                           |            | Temperature (corrected) C (0.70     |
| amplor(s)  |                    | quished under / |                          | 4            | 287         | 495              | 774          | 198  | Sample       | Relinqui       | shed under     | Airbili No.      | 80            | 2249                   | 539                     | 162                       |            | Temperature (corrected) C (0.70     |
| Forie ( yrear  | Relinquishe        | ind of          |                          | ĵ,           | Date:       |                  | Time:        |  | Receive      | ر روال         | ,              | 1.               | ,             | Date:                  |                         | Time:                     |            | Custody Seal Intact?                |
|  | YOM                | vo y            | MIL                      | <u></u>      | 101         | 17/98            | <del> </del> |  | 1/4          | Take           | <u>~</u> /_    | 300/2            | <u>~</u>      | 10:16                  | 58                      | 12                        | <u>, 3</u> | Yes No                              |
|  | Relinquish         | d by:           |                          |              | Dute        | :                | Time:        |  | Receive      | ed by:         |                |                  |               | Date                   |                         | Time                      |            | Custody Seal Intect?                |
| poler ID #   | ļ                  |                 |                          |              |             |                  | -            |  | <del></del>  | Д-,            | <del></del>    | 7.               |               | <del> </del>           |                         |                           |            | Yes No                              |
| RFA sampling complete?                                   | Rolinquish         | ed by:          |                          |              | Date        | 4                | Time:        |  | Receiv       | a striat       | oretory of     | [[]a.c.          | 00            | Date                   | 1/64                    | Time:                     | ·Ú11       | Custody Soni Intact?                |
| Yes No   |                    | CI              | hrysler C                | orpore       | ation 8     | 00 Chrys         | ler Driv     | e. CIMS  | 482-00       | -51. Aub       | urn Hills      | Michioa          | n 48326       | 10//<br>-27 <b>5</b> 7 | 771                     | 10.                       | 700        | (Yes No                             |
|  | Distributi         | on: White cor   | ny: Data                 | nackas       | ae Vel      | llow . Pet       | ained by     | laborato   | Dinl         | . Datair       |                |                  |               |                        |                         |                           | C          | k Sealed                            |
|  |                    | 1               | ~/                       |              | 4           | <i>_</i>         | •            | Star   | 000          | 11             | D 4            | -                |               |                        |                         |                           |            | Sander Total                        |
| 5  | mal                | 101             | Va                       | Cl           | 20          | w                | , <u> </u>   | מש טן נ  |              | <i>/</i>       | _ /            |                  |               |                        |                         |                           |            | Scaples Intert<br>Cooker temp 60    |
|  | angl               | )               | , -                      |              |             |                  |              | C  | /            | 7)             | E 19           | 17/9 8           | <b>&gt;</b>   |                        |                         |                           |            |                                     |
| Revision No. 1   | /                  |                 |                          |              |             |                  |              |  |              | •              |                | 11/20            | an            | ٠                      |                         |                           |            | Page of b                           |
| Chemist. September 23, 1997                              |                    |                 |                          |              |             |                  |              |  |              |                |                | 11 70            | -             |                        |                         |                           |            |                                     |

| CHRYSL                                       | ER   |                   |   |             |                      |                 |               |        |  |          | Chai   | n-of-       | -Cus     | stod  | y             |              | $\neg \top$ | 03735 A                           |
|--|--|-------------------|---|-------------|----------------------|-----------------|---------------|--------|--|----------|--|-------------|----------|-------|---------------|--------------|-------------|-----------------------------------|
| CORPOR                                       | RATIC  |                   | 4/  | 4 C         | 2tr.                 | GW.             | Sump<br>nal f | line   |  |          |  |             |          |       |               |              |             |                                   |
| ompuChem                                     |  | Project           | Name:   | Dev         | ton                  | Therm           | ral f         | milly  | ets  |          | Con  | sultant:    | tico H   | 6 B   | mil           | lu / s       | 4           | Griban Ince                       |
| 01 Madison Avenue                            |  | Site L            | ocation:  | Da,         | Ihu.                 | OH              |               |        |  |          | A  | ddress:     | 3/2/     | 0'W   | . 6           | R            | d.          | Fraherm, Ince                     |
| ary, NC 27513                                |  | Sit               | e Code:   | -           | SC 0                 | 01              |               |        |  |          |  | _           | Str      | 34/   | MIL           | / <b>.</b> . | 551         | 12                                |
| hone Number: 1-800-833-5097                  |  | RFAN              | Number:   |             | 601                  | 9800            | 0254          | -7     |  |          | Consult  | ant PM:     | Ken      |       |               |              |             |                                   |
| ax Number: (919) 379-4050                    | <u>,                                    </u> |                   | ler PM:   | <u>_</u> (ჯ | iry                  | Sanz            | uK            |        |  |          |  | Phone:      | 65×4     |       |               |              |             | Fax: 651-490-1006                 |
| urn-around Time Request:                     |  | ge Deliverat      | oles: (ctr  | rcle)       | _,                   | C               | ompound       | List-P | arameter   | Metho    | d/Bottle T                                       | ype/Pres    | ervative |       |               |              |             | Matrix Codes                      |
| 4 calendar hrs.                              | Chrysler Le                                  |                   |   |             |                      |                 |               |        |  |          |  |             |          | 1     | S - So        |              |             | SW - Surface Water                |
| 8 calendar hrs.                              | Other (speci                                 |                   |   |             |                      |                 | 1             | ]      | 1  |          | } ]  | ]           | 1        |       | GW -          |              |             | ter AAir                          |
| days<br>days                                 | Ouler (speci                                 | ily).             |   |             |                      | 1               | 1             |        | 1  |          | 1 1  | 1           | - 1      | 1     | Sed.          |              |             | <b>.</b>                          |
| 3 days                                       | -t   |                   |   |             |                      |                 |               |        | 1  |          | { }  |             | 1        |       | 0-0<br>Iab    | Use (        |             | <u> </u>                          |
|  |  |                   |   |             | 6                    | 1               | }             | ļ      |  |          | 1  | }           | 1        |       |               |              |             |                                   |
|  |  |                   |   | ļ .         | Total # of Container | 0               |               |        |  |          |  | ļ           | - 1      |       | 7             | 2            |             |                                   |
|  |  |                   | 6 g   | ی           | 💆                    | 9               |               |        |  |          |  |             |          |       | ¥ °           | 7 × ×        |             | l                                 |
|  | Ì  |                   |   | Matrix Code | ម៉                   |                 |               |        |  |          |  | ľ           |          |       | Volatiles pH  | PH<br>e b    | •           | ·                                 |
|  | Date   | Time              | D (G)   | . Ž         | *                    | $ \mathscr{D} $ | 1             | ,      |  |          | 1 1  | 1           | 1        |       | ·             | 4 1          | -           |                                   |
| Field Sample Identification                  | Collected                                    | Time<br>Collected | Grab (G<br>Compos                                 | ₹           | l g                  |                 |               |        | 1  |          | 1 1  | 1           | 1        |       | 3             | Metals pH    | 4           | Remarks                           |
| MWA-3 MS/MSD                                 | percy  | 16:01             |   | EW          | 2                    | X               |               |        |  |          |  |             |          |       |               |              | 1           |                                   |
| PZ-14I                                       | 10/14/99                                     |                   | 1   | 1           | 2                    | X               |               |        |  |          | 1  |             |          |       | 1 1           | +            | +-          |                                   |
| MWA-2  | 1 1  | 16:25             |   | 11          | 2                    | X               |               | •      |  |          |  |             |          |       |               | $\top$       | +           |                                   |
| MWA-2 MS/MSD                                 | 11   | 16:26             |   | 11          | 2                    | ×               |               |        | <del>                                     </del> |          | <del>                                     </del> |             |          |       |               | $\dashv$     | +-          |                                   |
| PZ-16D                                       |  | 16:30             |   | ††          | 2                    | 1               |               |        | <del> </del>                                     |          | <del>                                     </del> |             |          |       | 1 1           | +            | +-          |                                   |
| MWR-6  | 10/15/9                                      | <del></del>       | <del>                                      </del> | 11          | 2                    | 文               |               |        | <b>-</b>   |          | <del>                                     </del> | <u> </u>    |          |       | 1             | _            | +           |                                   |
| MWB-6<br>MW-5'S                              |  | 8:15              |   | ††          | 2                    | 文               |               |        |  |          | 1  |             |          |       | 1             | $\dashv$     | +-          |                                   |
| E101598-3                                    |  | 8:17              |   | † †         | 2                    | X               |               |        | <u> </u>   |          | <del>                                     </del> |             |          |       |               | +            | _           | Equipment blank                   |
| PZ-8I  |  | 8:20              |   | +           | 1 2                  |                 |               |        | †  |          | <del> </del>                                     | <b>†</b>    |          |       | † †           |              | 1           | C displayed                       |
| PZ - 6 D                                     | 1  | 8:25              | V   | 1           | , 2                  | X               |               |        |  |          | 1  |             |          |       |               | $\sqcap$     |             | oplué de la DE                    |
| appper(s)                                    | Bottles Relic                                | quished under /   | Urbill No   | 4.          | 287                  | 495             | 7 749         | 8      | Samples  | Relinqui | shed under                                       | Alrbill No. | 802      | 1499  | 534           | 62           |             | Temperature (corrected) C 10/17/6 |
| Jones Musel                                  | Relinguisher                                 | wer               | ,   | 00          | Date                 | 4.~/.~          | Time:         |        | Received   | ,,,      |  |             |          | Date: |               | Time:        |             | Custody Soul Intest?              |
|  | 100  | wip               | vsa   | KN_         | 10/                  | 17/98           | ļ             |        | Na   | the      | <u>~ /3</u> 0                                    | 076         |          |       |               | ļ            |             | Yes No                            |
|  | Reitsquishe                                  | d by:             |   | •           | Den                  | r.              | Time:         |        | Received   | by:      |  |             |          | Dates |               | Time         |             | Custody Seel Intact?              |
| coler ID#                                    |  |                   |   | ····        | <del></del> _        | ·····           | <del> </del>  |        | <b></b>  | 4        | <del></del>                                      | ······      |          |       |               | <u> </u>     |             | Yes No                            |
| RFA sampling complete?                       | Relinquishe                                  | d by:             | . •   |             | Dete                 | E               | Time:         |        | Received   | ledy Lab | oritory by:                                      | cm          |          | Dute: | 1.            | Time         |             | Custody Seel Intact?              |
| No   |  |                   |   |             |                      |                 | <u> </u>      |        | 112  | TAN      | <u> </u>   | <u>Will</u> | Re       | VQL.  | 7/91 <u>.</u> | 10           | .90         | No No                             |
|  | Dietributio                                  | on: White cop     |   |             |                      |                 |               |        |  |          | urn Hills,                                       |             |          |       |               |              |             |                                   |
|  |  |                   |   |             |                      |                 | -             |        | · ,  |          | -  | ipier       | •        | C/C   | ر ع           | Pa           | 100         | 1 Samples islant                  |
|  | 5a   | mol               | es'   | 0           | ac                   | Q de            | in            | _ 5    | Yord   | 29       | l 1  | D           |          | (     | 100           | le           | - (         | teny 6° (US)                      |
|  | m  |                   | /   | •           | _                    | 1/9             | 75 1A         | 1/17/9 | 2 p  | 0        |  |             |          |       |               |              |             | Page 2 of 3                       |
| Revision No. 1<br>Opered. September 23, 1997 |  | -                 |   |             | 7                    | , ,             | <i>,</i>      | 11.    | 3001   | ^        |  |             |          |       |               |              |             | Page of                           |

| CHRYSLI  | ER   |                   |  |                 |   |              |               |             |  |  | Chai         | in-of          | -Cus     | stod         | y            |             | ı       | 03736 A                               |
|--|--|-------------------|--|-----------------|---|--------------|---------------|-------------|--|--|--------------|----------------|----------|--------------|--------------|-------------|---------|---------------------------------------|
| CORPOR   | RATIO  | N                 | 4  | H Q             | tr. (   | י -נואצ      | Sample        | oi 4        |  |  |              |                |          |              | <u>-</u>     |             |         |                                       |
| puChem   |  | Project           | Name:  | Days            | tur   | The n        | vel Pr        | Schue       | B  |  | Con          | sultant: (     | Lager    | 4e. 2        | ן נא         | hea         | p1 &    | Graham Inc                            |
| Madison Avenue                                   | ļ  | Site L            | ocation:   |                 |   | OH           |               |             |  |  |              |                | 1210     |              |              |             |         |                                       |
| , NC 27513                                       | ļ  | Sit               | e Code:  |                 | -00   |              |               |             |  |  |              | _              | 54.      | Paul         |              | 1N.         |         |                                       |
| ne Number: 1-800-833-5097                        | - [  |                   | lumber:  |                 |   |              | 00 25         | <u>4-T</u>  |  |  | Consul       | tant PM:_      | Ken      | Vog l        |              |             |         |                                       |
| Number: (919) 379-4050<br>m-around Time Request: | Data Packer                                      |                   | ler PM:  |                 | <u>~ y </u>                                   |              | zaK           |             |  |  |              | Phone:         |          | 490-         | 14           | 01          |         | Fax: 651-490-1006                     |
| n-around time Kequest.                           | Chrysler Lev                                     |                   | жэ: (сп  | Tie)            | ł   |              | ompound       | List-P      | ramete   | /Method  | /Bottle      | ype/Pre        | ervative |              | S - S        | - il        |         | Matrix Codes SW - Surface Water       |
| alendar hrs.                                     | Chrysler Lev                                     |                   |  |                 | j   |              |               |             |  |  | Ì            | 1              |          |              |              |             | ind wat |                                       |
| lavs   | Other (specif                                    | (y):              |  |                 | 1   |              | 1             |             |  |  |              | ľ              | 1        | Ì            | Sed.         | - Sedi      | ment    |                                       |
| lays   | ┺——  |                   |  |                 |   |              |               |             |  |  |              | 1              | 1        |              |              |             |         | y) Sparge Water                       |
|  | T  |                   |  |                 |   |              |               |             |  | ļ  | 1            |                | -        | }            | Lab          | Use (       | Into [  | • •                                   |
| •  |  |                   |  | <b>{</b>        | Dec   |              |               |             |  |  |              |                | 1        |              |              | ~           | . 1     |                                       |
|  |  |                   | ច  |                 | 를   | 0            |               |             |  |  |              | ļ              |          |              | 7            | 7 7         |         |                                       |
|  |  |                   | )<br>E G   | <del>ខ</del> ្ល | ည   | 826          |               |             |  |  |              |                | 1        |              | Hd           | ٧<br>٣      | .       |                                       |
|  |  |                   | 9 8  | ر<br>بز         | #   | 8            |               |             |  |  |              | i l            |          |              | 4            | 4 4         |         |                                       |
| Field Sample Identification                      | Date<br>Collected                                | Time<br>Collected | Grab (G) or<br>Composite (C)                     | Matrix Code     | Total # of Contain                            |              |               |             |  |  |              | ,              |          |              | Volatiles pH | Metals pH < | 4       | Remarks                               |
| FZ-9D  | 10/15/98   |                   | G  | GW              | 2   | X            |               |             |  | <b></b>  |              |                |          |              |              |             |         |                                       |
| MW-105   | 1  | 9:30              | Ť  | 1               | 2   | X            | 1             |             | <del>                                     </del> |  |              |                |          |              |              |             | +-      |                                       |
| PZ-10 I  | 1-1-   | 9:35              |  | 11              | Z   | 文            | 1             |             |  | <del> </del>                                     | <b></b>      |                |          |              | $\vdash$     | $\dashv$    | +-      |                                       |
| PZ-17D   | +  | 1010              | $\vdash$   | ++-             | 2   | 1            | <del>  </del> |             | <del> </del>                                     |  | <del></del>  |                |          |              |              | -           | +-      |                                       |
| PZ- 17 I   | <del>                                     </del> | <del> </del>      | ╁╌╂╌   | +               | 2   | 1            | +             |             | <del> </del>                                     | <del> </del>                                     |              | <del> </del> - |          |              | ╁┈           | $\dashv$    | +-      |                                       |
|  | ++   | 10:20             | <del>{                                    </del> | ++-             | 2   | +5           |               |             | <del> </del>                                     | <del>                                     </del> | ļ            |                |          |              | ╁            | -           | +-      |                                       |
| MWA-1  | +  | 11:00             | 11/  | 11-             | +   | +~           | <del>  </del> |             | <del> </del>                                     | <del> </del>                                     | <del> </del> | ļ              |          |              | -            | -           |         |                                       |
| MW A - 4   | <del>- -}</del>                                  | 14:15             | <del></del>                                      | V               | 2   | X            |               |             | 1  | 1  | ļ            | ļ              |          | ,            | ╄            | -           | -       |                                       |
| Sparge H20                                       | 14,  | 16.45             |  | 10              | 2   | X            | in            | u a         | Se   | se:  | Day          | e 51           | rand     | 0/19/9       | <del>-</del> |             | -       |                                       |
| MW-205   | 10/14/98   | 3 10:45           | 14   | <del> </del>    | 3   | ×            | <u> </u>      |             | ļ  |  | <u> </u>     |                | <u> </u> | ļ            |              |             |         |                                       |
|  |  |                   | $\perp V$  | 1               |   | <u> </u>     |               |             |  | <u> </u>   |              | <u> </u>       |          |              |              |             |         | 10:45                                 |
| Municipal Present                                | Bottles Reliq                                    | uished under /    | Lirbill No                                       | <u>42</u>       | <u>87                                    </u> | 495          | 7 7492        | <u> </u>    | Samples  | Relinquis  | hed under    | Airbill No.    | 807      | 1995         | 53           | 462         | <u></u> | Temperature (corrected) 40 C 10/17/95 |
| Min ( Made                                       | Relinguished                                     | rick              | 10   | . 4             | Date  | 11/70        | Time:         |             | Receive  | d by:  |              |                |          | Dute:        |              | Time        | l       | Custody Seel Intact?                  |
|  | 100  | acce              | ju   | 2004            | 7(4   | 1740         | -             | <del></del> | <del></del>                                      |  |              |                |          | <del> </del> |              | -           |         | Yes No                                |
| <del></del>                                      | Relinquished                                     | l by:             |  |                 | Dute  | •            | Time:         |             | Receive  | d by:  |              |                |          | Dates        |              | Time        | 1       | Custody Seel Intact?                  |
| oler ID #  |  |                   |  |                 | +-  |              |               |             | 1  | 1  | <del></del>  |                |          | <del> </del> |              | _           |         | Yes No                                |
| RFA sampling complete?                           | Relinquished                                     | 1 by:             |  |                 | Date  | ×            | Time:         |             | Receive  | d for Late                                       | relory by:   | Du             | n        | Dete:        | 190          | Time        | '400.   | Custody Soul Intect?  Yes No          |
|  |  | CI                | erysler (  | Corpora         | tion 8  | 300 Chry     | sler Drive    | , CIMS      | 482-00-  | 51, Aubi   | ırn Hills,   | Michiga        |          |              | -7.5         |             |         |                                       |
|  | Distributio                                      | n: White co       | y: Data  | packag          | e Ye  | llow : Re    | etained by    | laborato    | ry Pinl  | : Retain   | ed by san    | npler          | C        | /c           | Se           | 20/         | rd      |                                       |
|  | _  |                   |  | /               |   | Á            | , -           |             | /  |  | _            |                | Š        | an           | P            | es          | u       | that ,                                |
|  | Sam  | .dn               | 1 1  | 7/1             | 10  |              | 11.           | 5           | tore   | 295  | 2            |                | _        | 1            | /            |             | /-      | start o                               |
|  | Jane   | pres              | - 1  | 1               | ربر<br>م                                      | سم<br>دارر پ | 7/08          |             |  | 8  | _            |                | (        | 00/          | س            | ~           | مس      | Page 3 of 3                           |
| Revision No. 1<br>Preside September 23, 1997     | ,  | 17                | ) 5  | <u> </u>        | 03  | 2 10/1       | 11            | <b>-</b> -  |  |  |              |                |          |              |              |             | , ,     | Tago W                                |

#### **MEMORANDUM**

To: Mark Bevan

Kenny McDaniel Brian Neptune Roy Sutton

From: Diane Ellmore

Date: October 19, 1998

Re: Case 33902

SDG 25401

CCN: 914740 ID corrected in LIMS. ID is now MW-7S

CCN: 914730 ID corrected in LIMS. ID is now MWA-6DUP

**SDG 25403** 

CCN: 914888 Sample logged into LIMS on 10/19/98 due to ID discrepancy on

COC verses bottle labels. Sample is backdated in LIMS to

10/17/98 (actual receipt date).

#### • COMPUCHEM a division of Liberty Analytical

# **LOG-IN VERIFICATION**

| Client: Chysler   | Project: RFA     | 254          | _          |
|---|------------------|--------------|------------|
| Case: 33902   | Date Received:   | 10/17/98     | - ,        |
| Were all sample I.D.'s checked?   |                  | Yes No       | cercective |
| Were all analyses on COC also on re   | eceipt log?      | Yes No       |            |
| Were any associated line item's miss  | sing?            | Yes /No      |            |
| Were all parameter's logged in?   |                  | Yes / No     |            |
| Were correct method numbers receive   | /ed?             | Yes / No     |            |
| Is any information absent from receive  | ving log header? | Yes No       |            |
| Were all blank lines on the receiving   | log z'ed out?    | Yes / No     |            |
| Was TAT verified (quick turn line ite   | ms used?)        | Yes / No     |            |
| Was QC designated and verified?   |                  | Yes No /     | N/A        |
| Is the field COC complete (signed/da  | ted, etc)?       | Yes / No     |            |
| Were all comments/issues recorded o   | n COC?           | Yes / No     |            |
| Signature: Jan Ellanon  | Date:            | 10/19/98     |            |
|   |                  | ·            |            |
| Corrective  |                  |              |            |
| Changed ID for Mw-75 to 1   | nw-78. Change    | ed ID on CCN |            |
| 914730 from MWA-6 to M<br>CCH 914888 uc d 10/19 & b<br>1D disrepency on CUC & | WA-6DUP. Z       | 13 due -     |            |
| 17 dias a con (1)11 &   | bottle labela    | 11/ au 10    |            |
| is men up uned on coce  | your lanery      |              |            |
|   |                  |              |            |
|   | 27               |              |            |
| Completed By:   | MINI Date:       | 12/19/98     | 1.0        |

PAGE

1

ATTN: MR. KEN VOGEL

1210 WEST COUNTY Rd. E, STE700

ST. PAUL, MN 55112

RECEIVE DATE:

10/17/98

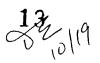
QUOTE NUMBER:

98-00070800000501112

ORDER NUMBER:

| SAMPLE ID   | TURNAROUND** TIME | ANALYSIS                          |         | COMPUCHEM<br>NUMBER |  |
|-------------|-------------------|-----------------------------------|---------|---------------------|--|
| B101498-1/  | 10                | TCL Voa/Meth. 8260(25ml)/Water/C  | Case ID | 914726              |  |
| E101498-2 🗸 | 10                | TCL Voa/Meth. 8260(25ml)/Water/C  | Case ID | 914753              |  |
| E101598-3 🗸 | 10                | TCL Voa/Meth. 8260(25ml)/Water/C  | Case ID | 914764              |  |
| MW-105 🗸    | 10                | TCL Voa/Meth. 8260(25ml)/Water/C  | ase ID  | 914768              |  |
| MW-11S /    | 10                | TCL Voa/Meth. 8260(25ml)/Water/C  | ase ID  | 914754              |  |
| MW-11SDUP/  | 10                | TCL Voa/Meth. 8260(25ml)/Water/C  | ase ID  | 914755              |  |
| MW-15S ✓    | 10                | TCL Voa/Meth. 8260(25ml)/Water/C  | ase ID  | 914752              |  |
| MW-18S~     | 10                | TCL Voa/Meth. 8260(25ml)/Water/C  | ase ID  | 914737              |  |
| MW-195 ✓    | 10                | TCL Voa/Meth. 8260(25ml)/Water/C  | ase ID  | 914734              |  |
| MW-205 V    | 10                | TCL Voa/Meth. 8260(25ml)/Water/C  | ase ID  | 914777              |  |
| MW-75 75    | 10                | TCL Voa/Meth. 8260(25ml)/Water/C  | ase ID  | 914740              |  |
| MW-85       | 10                | TCL Voa/Meth. 8260(25ml)/Water/C  | ase ID  | 914763              |  |
| MWA-1·✓     | 10                | TCL Voa/Meth. 8260(25ml)/Water/C  | ase ID  | 914774              |  |
| MWA-2 ✓     | 10                | TCL Voa/Meth. 8260(25ml)/Water/C  | ase ID  | 914760              |  |
| MWA - 3:/   | 10                | TCL Voa/Meth. 8260(25ml)/Water/C  | ase ID  | 914758              |  |
| MWA - 4 🗸   | 10                | TCL Voa/Meth. 8260(25ml)/Water/C  | ase ID  | 914775              |  |
| MWA-5✓      | 10                | TCL Voa/Meth. 8260(25ml)/Water/C  | ase ID  | 914743              |  |
| MWA-6 ✓     | 10                | TCL Voa/Meth. 8260(25ml)/Water/C  | ase ID  | 914744              |  |
| MWA-GOUP /  | 10                | TCL Voa/Meth. 8260(25ml)/Water/C  | ase ID  | 914746              |  |
| MWB-1       | 10                | TCL Voa/Meth. 8260(25ml)/Water/Ca | ase ID  | 914730              |  |
| MWB-2 ✓     | 10                | TCL Voa/Meth. 8260(25ml)/Water/Ca | ase ID  | 914738              |  |
| MWB - 3 ✓   | 10                | TCL Voa/Meth. 8260(25ml)/Water/Ca | ase ID  | 914756              |  |
| MWB-4       | 10                | TCL Voa/Meth. 8260(25ml)/Water/Ca | ase ID  | 914732              |  |
| MWB-5       | 10                | TCL Voa/Meth. 8260(25ml)/Water/Ca | ase ID  | 914742              |  |
| MWB - 6 ✓   | 10                | TCL Voa/Meth. 8260(25ml)/Water/Ca | ase ID  | 914762              |  |
| MWC-1       | 10                | TCL Voa/Meth. 8260(25ml)/Water/Ca | ase ID  | 914729              |  |
| MWC-2       | 10                | TCL Voa/Meth. 8260(25ml)/Water/Ca | ase ID  | 914739              |  |
| MWC-3√      | 10                | TCL Voa/Meth. 8260(25ml)/Water/Ca | ase ID  | 914757              |  |
| PZ-10I 🗸    | 10                | TCL Voa/Meth. 8260(25ml)/Water/Ca | ase ID  | 914769              |  |
| PZ-12D 🗸    | 10                | TCL Voa/Meth. 8260(25ml)/Water/Ca | ase ID  | 914751              |  |
| PZ-12I 🗸    | 10                | TCL Voa/Meth. 8260(25ml)/Water/Ca | ase ID  | 914750              |  |
| PZ-13I√     | 10                | TCL Voa/Meth. 8260(25ml)/Water/Ca | se ID   | 914745              |  |
| PZ-14I ✓    | 10                | TCL Voa/Meth. 8260(25ml)/Water/Ca | se ID   | 914759              |  |
| PZ-16D 🗸    | 10                | TCL Voa/Meth. 8260(25ml)/Water/Ca | se ID   | 914761              |  |

<sup>\*\*</sup> Please note that turnaround time and sample due dates will be, whenever applicable, calculated and determined by the last sample received in a Sample Delivery Group.



LEGGETTE BRASHEARS & GRAHAM

ATTN: MR. KEN VOGEL

1210 WEST COUNTY Rd. E, STE700

ST. PAUL, MN 55112

RECEIVE DATE:

10/17/98

QUOTE NUMBER:

98-00070800000501112

ORDER NUMBER:

33902

| SAMPLE ID    | TURNAROUND** TIME |     | A         | NALYSIS                 |    | COMPUCHEM<br>NUMBER |   |
|--------------|-------------------|-----|-----------|-------------------------|----|---------------------|---|
| PZ-17D V     | 10                | TCL | Voa/Meth. | 8260(25ml)/Water/Case   | ID | 914770              | - |
| PZ-17I√      | 10                | TCL | Voa/Meth. | 8260 (25ml) /Water/Case | ID | 914773              |   |
| PZ-19I/      | 10                | TCL | Voa/Meth. | 8260 (25ml) /Water/Case | ID | 914735              |   |
| PZ-20D 🗸     | 10                | TCL | Voa/Meth. | 8260(25ml)/Water/Case   | ID | 914736              |   |
| PZ-21I~      | 10                | TCL | Voa/Meth. | 8260(25ml)/Water/Case   | ID | 914733              |   |
| PZ-22I 🗸     | 10                | TCL | Voa/Meth. | 8260(25ml)/Water/Case   | ID | 914731              |   |
| PZ-71/       | 10                | TCL | Voa/Meth. | 8260(25ml)/Water/Case   | ID | 914741              |   |
| PZ-8D 🗸      | 10                | TCL | Voa/Meth. | 8260(25ml)/Water/Case   | ID | 914766              |   |
| PZ-8I 🗸      | 10                | TCL | Voa/Meth. | 8260(25ml)/Water/Case   | ID | 914765              |   |
| PZ-9D 🗸      | 10                | TCL | Voa/Meth. | 8260(25ml)/Water/Case   | ID | 914767              |   |
| SPARGEH2O 🗸  | 10                | TCL | Voa/Meth. | 8260(25ml)/Water/Case   | ID | 914776              |   |
| TBLK101498 / | 10                | TCL | Voa/Meth. | 8260(25ml)/Water/Case   | ID | 914747              |   |

914888 ST De 2 14888 ST DE 2 1

Kol19

PAGE

<sup>\*\*</sup> Please note that turnaround time and sample due dates will be, whenever applicable, calculated and determined by the last sample received in a Sample Delivery Group.

# CompuChem WATER BATCH SHEET

RFA 254

|      | LINKER        | W8760              |          |          | TAT_     | 10    | _ sow    |        |          |         | -                 |          | ***      |
|------|---------------|--------------------|----------|----------|----------|-------|----------|--------|----------|---------|-------------------|----------|----------|
| ſ    | CCN           | CLIENT ID          | QC       | SAMPLE   | ρН       | TIME  | DATE     | INST.  | OPERATOR | H/T     | VOLUME            | SCREEN   | ANALYSIS |
| Į    |               |                    | TYPE     | ORIGINAL |          |       | RUN      |        | •        |         | INSTRUCTIONS      |          | BOTTLE # |
| 1)   | 914771        |                    | SS       |          |          | 1573  | 10.24.98 | 54     | 2347     |         | 1355/1046 914777= | crucy of | ol       |
| 2)   | 914772        |                    | SS       |          |          | 1548  | <u> </u> | 1      | 1        |         | <b>↓</b>          | of       | of       |
| 3) [ | 914770        | PZ-17D             |          |          | 1        | 1101. | 102398   | 56     | 2361     | 1929    |                   | ol       | 10       |
| 4)   | 914773        | PZ-17I             |          |          | (        | 1343  |          |        | 1 1      |         | 350,iL            | of       | 01       |
| 5)   | 914774        | MWA-I              |          |          | 1        | 1421  |          |        |          |         | フタシャト             | of       | 10       |
| 6)   | 914775        | MWA-4              |          | <u> </u> |          | 1500  |          |        |          |         | 15x               | ol       | of       |
| 7)   | 914776        | SPARGEHZE KM 10/20 | 98       | <u> </u> | 1        | 1540  |          |        |          | 1       |                   | of       | of       |
| 8)   | 914777        | MW-20S             |          |          | 5        | 1142  |          |        |          | '°/28   | RN                | of       | ot       |
| 9)   | 914888        | PZ-15I             |          |          |          | 1307  | ₩        | 1      | <u> </u> | 1       | 1                 | of       | of       |
| 10)  | 915062        | VLCS71             | LCS      | ļ        | <u> </u> | 1002  | 102398   | 56     | 2361     |         |                   | ol       | of       |
| 11)  | 414770R1      |                    |          |          |          | 0206  | 10.24.98 | 54     | 22.50    |         | 1.5ml             | of       | of       |
| 12)  | 9147778       |                    | <u> </u> | <u> </u> | <u> </u> | 0236  |          | 1      |          |         | 350,13            | of       | of       |
| 13)  | 914774        |                    |          | <u> </u> | _        | 0307  | 1        |        | 7        |         | 7500 450 L        | of       | of       |
| 14)  | 91477681      |                    |          |          |          | 1427  | 10.24.98 | 54     | 2347     |         | RN                | of       | of       |
| 15)  | 4147750       |                    | <u> </u> |          | _        | 0337  | 10.24.98 | 54     | 2230     |         | -15 A 30,0        | 01       | ol       |
| 16)  | 914688R1      |                    |          |          | _        | 1340  | 1        |        | 4        |         | RO 10.5ml         | of       | of       |
| 17)  | 91477382      |                    |          |          |          | 1309  | 10.24.98 | 54     | 2347     |         | 630uL             | 01       | of       |
| 18)  | 916243        | VLCS34             | LCS      |          | _        | 1213  | 10.24.98 | 54     | 2347     |         |                   | of       | of       |
| 19)  |               |                    |          |          |          |       |          |        |          |         |                   | 01       | of       |
| 20)  |               |                    |          |          |          |       |          |        |          | <b></b> |                   | of       | of       |
| 21)  |               |                    |          |          |          |       |          |        |          |         |                   | ol       | of       |
| 22)  |               |                    |          | +        |          |       |          |        |          |         |                   | 10       | ol       |
| 23   |               |                    | 1        |          | 1        |       |          |        |          |         |                   | 181012K  | ol ol    |
|      | Relinquished  | 1 By Pota          |          | Date     | 1023     |       | Receiv   | ved By | 4-86     |         | Date              | 102398   |          |
|      | Relinquished  |                    |          | Date     | 1000     | 18    | Recei    | ved By | -11-6,   | ند      | Date              | 102348   |          |
|      | Relinquished  | d By               |          | Date     |          |       | Rocoi    | ved By |          |         |                   | 102378   |          |
|      | r <del></del> | Ref?               | <u>ر</u> |          | 10-20    | •     |          |        | KP       |         |                   | 0.24.98  |          |
|      | Log Pago U    | pdated             | _KP      |          | 10-2     | 4.58  |          |        | Ref ?    | _       | ı                 | 10.24.98 |          |

mark

# INTERNAL CHAIN-OF-CUSTODY

| Labo     | ratory:                               | VOA               |             | Requested By: Kr  | n                            |
|----------|---------------------------------------|-------------------|-------------|-------------------|------------------------------|
| Wate     | r _                                   | Soil P.E.         | ·           | Date: 10/20/97    | Shift: 1 2 Sat               |
|          |                                       | Commercial        |             |                   | circle one                   |
|          |                                       | RECEIPT           |             |                   | RECEIVING USE ONLY           |
| ļ        | CCN                                   | DATE              | PRES.       | PARAMETER         | BOTTLE NUMBER                |
|          | 114770                                | 10/17             |             |                   | 1+2 of 2                     |
| 2        | 773                                   |                   |             |                   | 1+2 of 2                     |
| 3        | 774                                   |                   |             |                   | 1+7 of 2                     |
| 4        | 775                                   |                   |             |                   | 1+2 of 2                     |
| 5        | 776                                   |                   |             |                   | 1+2 of 2                     |
| 6        | 777                                   |                   |             |                   | 2-3 of 3                     |
| 7        | 888                                   |                   |             |                   | 1+2 of 2                     |
| 88       | - <del></del>                         |                   |             |                   | of                           |
| 9        |                                       |                   |             |                   | of                           |
| 10       |                                       |                   |             |                   | of                           |
| 11       |                                       |                   |             |                   | of                           |
| 12       |                                       |                   |             |                   | of                           |
| 13       |                                       |                   |             |                   | of                           |
| 14       |                                       |                   |             |                   | of                           |
| 15       |                                       |                   | <del></del> |                   | of                           |
| 16       |                                       |                   |             |                   | of                           |
| 17       |                                       |                   |             |                   | of                           |
| 18       |                                       |                   |             |                   | of                           |
| 19       | <del></del>                           |                   |             |                   | of                           |
| 20       |                                       |                   |             |                   | of                           |
| Relinqui | shed<br>RB2                           | 3 <u>ss</u> Date: | 10/20/98    | Received  By: & Z | Date: <u>/ひみつ</u> で <u>も</u> |
| Relinqui | shed                                  |                   |             | Received          | •                            |
| Зу:      | <del></del>                           | Date:             | <del></del> | By:               | Date:                        |
| Comme    | ents:                                 |                   |             | <del>.</del>      |                              |
|          | · · · · · · · · · · · · · · · · · · · |                   |             |                   | 16                           |

# CompuChem Receiving Log

| 1001: (1)   | 12:121       | er IBG                | T              |                       | receiving Log                                    |                                       |             |   |              |          |
|---|--------------|-----------------------|----------------|-----------------------|--|---------------------------------------|-------------|---|--------------|----------|
| der #   | S A C        | 102                   | Received on    | 10-17-98              | # of COC's 5                                     | PPS RFA# 2.                           | FIL         | Page  |              | .3       |
| uer#  | <u> </u>     | 10 L                  | Delivered by   | FED-6X                |  |                                       | 29          | rage  | -1-0         | 12       |
| oject : T   | ĒΗ.          | #254                  | Trieignt #     | el Various            | 0015   | Lab Instructions:                     |             | 7   |              | 112:10   |
| uote# 0   |              |                       | Subcontract    | Y /(N)                |  | 100                                   | VOC         | <u> </u>  |              |          |
| count #_  | 50           | 112                   | TAT : Verbal   | Hardo                 | opy 10 day                                       |                                       |             |   |              |          |
| SDG   | REQ          |                       | CCN            | AMOUNT /<br>CONTAINER | PARAMETER  | ANALYGIG                              | LINE        | SAMPLE  |              |          |
| 25401   | -            | E101498-16B           | 1914726        | 3-60m/ VOA            | TCLVOA   | ANALYSIS CODE                         | ITEM        | DATE  |              |          |
| <del></del>                                       | 2            | MWC-1                 | 729            | TOTAL VOL             | ICCVOH   | 1356                                  |             | 10/14/98  | WAL          | NA       |
| <del></del>                                       | 3            | MWB-1                 | 730            |                       | <del>                                     </del> | +                                     |             | <del>                                     </del>  | ++-          | 1        |
|   | 4            | PZ-22I                | 131            |                       |  | +                                     |             | <del>                                     </del>  | ++-          |          |
| <del></del>                                       | 5            | MWB-4x                | 732            |                       | <del>                                     </del> | -                                     |             | <del>                                     </del>  | ##           |          |
| <del>                                      </del> | 16           | PZ-21I                | 733            |                       |  | <del>   </del>                        |             | <del> </del>                                      | 111          |          |
| +   | 7            | MW-195                | 734            |                       |  |                                       | <del></del> | <del>                                     </del>  | +++          |          |
| +   | 8            | MW PZ-19I             | 735            |                       | <del>                                     </del> | +                                     |             | <del></del>                                       | +++          |          |
|   | 9            | PZ-20D *              | 736            |                       | <del>                                     </del> | +                                     |             | <del>                                     </del>  | 111          |          |
| 4   | 10           | MW -18S               | 737            |                       | <del> </del>                                     | -                                     |             | <del>  </del>                                     | H +          |          |
| 4   | 111          | MWB-2 *               | 138            |                       | <del>                                     </del> | +                                     |             | <del>                                     </del>  | H            |          |
| 2   | 12           | MWC-2                 | 739            |                       |  |                                       |             | <del>                                     </del>  | +++          |          |
| 3   | 113          | MW-75                 | 740            |                       | <del>                                     </del> | -                                     |             | <del>                                     </del>  | H +          |          |
|   | 14           | PZ-71                 | 741            |                       | <del>                                     </del> | -                                     |             | <del>                                     </del>  | H +          |          |
| 5   | 15           | MWB-5                 | 742            |                       | <del>                                     </del> | -                                     |             | <del>                                      </del> | #            |          |
| 5   | 16           | MWA-5                 | 743            |                       |  | -                                     |             | <del>                                     </del>  | H            |          |
| 7   | 17           | MWA-6                 | 744            |                       | <del>                                     </del> | +                                     |             |   | ##           |          |
| В   | 18           | PZ-13I                | 745            |                       | <del> </del>                                     | +                                     |             | <del>     </del>                                  | $\coprod$    |          |
| 9   | 19           | MWA-GOUP              | 746            | ,                     | <del> </del>                                     | +                                     |             | 1   | 44-4         |          |
| 025402  | 20           | TBLK101498            | 19), 747       | 2-60M/ VOA            | <del>                                     </del> | <del></del>                           |             | <del>                                     </del>  | 44           |          |
| ogged In B  | y : <u>Μ</u> | Pelissas              | true           |                       | Order Entered By                                 | Melina                                | Stor        | 11  | IVL          | <b>∀</b> |
| ;y <mark>a</mark> nide saп                        | nples o      | checked for sulfide a | and chlorine Y | //NA                  | Received in good                                 | · · · · · · · · · · · · · · · · · · · |             |   | <b>&gt;</b>  | •        |
|   |              | Counter / Page        | 1              | CCN's                 | , 12001400 III 9000                              | Condition Y N                         |             | <del></del>                                       | <del> </del> | -        |

# CompuChem Receiving Log

|           |                          | ······································ |   |  |                    |  |             |              |                |
|-----------|--------------------------|--|---|--|--------------------|--|-------------|--------------|----------------|
| lient: Ch | uple                     | Received on                            | 10/11/98  | # of COC's                                       | PPS / RFA #        |  | Page        | $2 \cdot of$ | 3              |
| rder #3   | 3902                     | Delivered by                           | Foderal Exp   | ness   | Lab Instructions : | MX   |             |              | $\infty$       |
| roject/©  | 2FA 254                  | Freight #                              |   | ser  |                    | KO   |             |              | <del></del> -  |
| uote #    | 8-7080                   | Subcontract                            | Y (N)   | ′ 0  | 129                |  |             |              |                |
| ccount #  | 501112                   | _ TAT : Verba                          |   | copy 10 day                                      |                    |  |             |              |                |
| T         |                          | 11111                                  | AMOUNT /  |  |                    | LINE   | SAMPLE      |              |                |
| SDG       | REQ SAMPLE ID            | CCN                                    | CONTAINER   | PARAMETER  | ANALYSIS CODE      | ITEM   | DATE        | 8425         |                |
| 25402     | 21 PZ-12I                | 914750                                 | 3-60m/V   | TCC VOA  | 1356               |  | 10 14 99    | WAL          | NA             |
|           | 22 PZ-12D                | 914751                                 |   |  |                    |  |             | H +          | +              |
|           | 23 MW-159                | 1752                                   | 2-60M/V   |  |                    |  |             | +++          | <del> </del>   |
|           | 0447=1:01498-            |  |   |  |                    |  |             | ╂┼┼┼         | +              |
| 35/03     | 35 PZ-15I                | 9/4888                                 | 3   |  |                    | <del>                                     </del> | <del></del> | ╂┼┼          | +              |
| 1 35402   | DO25 IMM-113             | 914751                                 | ,   |  |                    | <del>                                     </del> |             | ╁┼╌╂╌        | <del></del>    |
| ,         | 3736 MW-115D1            | JP   150                               |   |  |                    |  |             | +++          | <del></del>    |
| 3         | 5/8 7 MWB-3              | 750                                    |   |  |                    | <del>                                     </del> | +           | +++          | <del></del>    |
| 3         | 3029 MWA-3               | 75                                     | <del>71 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -</del> | ,  |                    | <del>  </del>                                    | +-+-        | +++          | +              |
| 0 25401   |                          | $\frac{1}{75}$                         |   |  |                    | <del>                                     </del> |             | +++          | +-             |
| 1 25402   | 301 MWA-24               | ms 76                                  |   | <del>'                                    </del> | <del></del>        | + + -  | + + -       | 111          | †              |
| 2         | 3B12PZ-16D               | 76                                     |   | ·Δ   |                    | + + -  | 1 5         | +++          | 1              |
| 3         | 3412 MWB-6               |  |   |  |                    | 1-1-   | 10/5kg      | 8 1 1        |                |
| 4         | 351/ MW-85               | 176                                    |   |  |                    |  | -1-4        |              |                |
| 5         | 36315101598              |  |   |  |                    |  |             |              |                |
| 7         | 3/12 PZ-8I               | 76                                     | 5   |  |                    |  |             |              |                |
| 8         | 3831 PZ-8D               | 760                                    | 6   |  |                    |  |             | 14           |                |
| 19        | 398 PZ-9D                | 76                                     | 7   |  |                    |  |             |              | <del>   </del> |
| 20        | 40% MW-10:               | 3 176                                  | 81 /  | <u> </u>   |                    | V  |             |              |                |
| _ogged In |                          |  |   | Order Entered                                    | By MEline          | s  |             |              |                |
| Cyanide 5 | amples checked for sul   | fide and chlorin                       | e Y / NA  | Received in go                                   | ood condition Y N  |  | ·           | <del></del>  | _              |
|           | lank(s) : Counter / Page | <b>a</b> /                             | CCN's   | 1  |                    | Temp   | erature(s)  | 4°           | C              |

# CompuChem Receiving Log

| ent: _ Ck | maler  |                    | Received on :  |      |                  | gf CO | C's         | PPS / F       | RFA #       |                  |       | Page   | <u>3</u> | of_          | 3    |
|-----------|--------|--------------------|----------------|------|------------------|-------|-------------|---------------|-------------|------------------|-------|--|----------|--------------|------|
| der#      |        |                    | Delivered by : |      |                  |       |             |               | structions: |                  | 1     |  |          | <del>(</del> |      |
| niect :   |        | $O^{\mu}\chi$      | Freight#       |      | $\sim 0^{\circ}$ |       |             |               | Ô           | X                |       |  |          |              |      |
| ote #     |        | le le              | Subcontract Y  | 1100 |                  |       |             |               | 109 V       | J                |       |  |          |              |      |
| count #   |        | 7                  | TAT : Verbal   | T.   | Hardco           | ру    |             |               | 1           |                  |       |  |          |              |      |
|           |        |                    | T              |      |                  | - /   |             | -             |             |                  |       | Same :   |          |              | _    |
| SDG       | REQ    | SAMPLE ID          | CCN            |      | OUNT /<br>TAINER | PAR   | AMETER      | ΙΔΝΔΙΝ        | SIS CODE    |                  | INE   | SAMPLE DATE                                      | MX       |              | la . |
| 25402     | 4      | PZ-10I             | 1914769        |      | om V             |       | - VOA       | <del></del>   | 56          | <u></u>          |       | 16/15/98   |          |              | A    |
| 25/03     | Uhu    | PZ-17D             | 914770         |      | )                | 1     | - 00/1      | 1             |             | 1                | <br>¦ | 11313  | 1        |              | 1    |
|           | (1B42  | P7-17-             | 914773         |      |                  |       |             |               |             |                  |       | <del>                                     </del> | 11       |              |      |
| 1-1       | 4      | MWA-I              | 914774         |      | <del> </del>     |       | <u> </u>    | <del> </del>  |             |                  |       |  | $\prod$  |              |      |
| 1         |        | MWA-4              | 914175         |      | 1                |       | 1           | 1             |             |                  |       |  | $\prod$  |              |      |
|           |        | SPARGE H20         | 1914776        |      | 1,.              |       | 1           | 1             |             |                  | 1     |  | $\prod$  |              |      |
|           | 474    | MW-203             | 1914777        | .3-  | Gomly            |       | 1.          | 1             | ,           |                  |       | 10/14/90   | $\prod$  | /            |      |
|           | 05.919 |                    |                |      |                  |       | <u> </u>    |               |             |                  | T     | T  |          |              | V.>  |
|           | 131    |                    |                |      |                  |       |             |               |             |                  |       |  |          | 1            |      |
|           |        |                    |                |      |                  |       |             |               |             |                  |       |  | 1        | $\perp$      |      |
|           |        |                    |                |      |                  | 1     |             |               |             | F                |       |  |          |              | ·    |
| ,         |        |                    |                |      |                  |       | 201         |               |             |                  |       |  |          |              |      |
| 3         |        |                    |                |      |                  | M     | 1           |               |             | $\mathbf{I}_{-}$ |       |  |          | $\perp$      |      |
| 1         |        |                    |                |      | <u>\</u> \\\     | M     |             |               |             |                  |       |  | $\bot$   | $\perp$      |      |
| 5         |        | 1                  |                | W.   | 2                | V     |             |               |             | $\perp$          |       |  | $\perp$  | 1            |      |
| 3         |        |                    |                | 1    |                  |       |             |               |             |                  |       |  | $\bot$   |              |      |
| 7         |        |                    |                | 1    |                  |       |             |               |             |                  |       |  |          | $\bot$       |      |
| 3         |        |                    |                |      |                  |       |             |               |             |                  |       |  | $\bot$   | 4            |      |
| 9         |        |                    |                |      |                  |       |             |               |             | $\cdot$          |       |  | $\bot$   | $\dashv$     |      |
| 0         |        |                    |                |      |                  |       |             |               |             |                  |       | 士  | 士        | 土            |      |
|           | ву 🔼   | Aslissa S          | te             |      | _                | Ord   | er Entered  | Ву : <u>У</u> | NElio       | DE               | 2     | =  |          |              | _    |
| _         |        | checked for sulfid | e and chlorine | YINA | <b>A</b> .       | Rec   | eived in go | od cond       | dition Y/N  |                  |       |  |          |              |      |
| •         |        | : Counter / Page   |                |      | CN's             |       | 1           |               |             | Т                | empe  | erature(s)                                       | 4        | _°C          | •    |

#### SAMPLE NO.

# VOLATILE ORGANICS ANALYSIS DATA SHEET

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25403

Matrix: (soil/water) WATER Lab Sample ID: 914777

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014777A56.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_ Date Analyzed: 10/23/98

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_(uL) Soil Aliquot Volume: \_\_\_(uL)

CONCENTRATION UNITS: UG/L
CAS NO. COMPOUND DL CONC

| 74-83-9 | CAS NO.  | COMPOUND   | DL   | CONC | Q                            |
|---------|--|--|--|------|------------------------------|
|         | 75-01-4 75-09-2 75-35-4 75-34-3 75-34-3 67-66-3 107-06-2 71-55-6 56-23-5 1061-01-5 79-01-6 124-48-1 79-00-5 124-48-1 79-034-5 108-88-3 108-88-3 108-90-7 100-42-5 74-87-3 75-15-0 78-87-3 108-10-1 591-78-6 78-93-3 156-60-5 | Vinyl ChlorideChloroethaneMethylene Chloride1,1-Dichloroethane1,1-DichloroethaneChloroform1,2-Dichloroethane1,1,1-TrichloroethaneCarbon TetrachlorideBromodichloromethaneTrichloroetheneTrichloroetheneTrichloroethaneTrichloroethaneBenzenetrans-1,3-DichloropropeneBromoformTetrachloroetheneTolueneTolueneChlorobenzeneEthylbenzene | 1 0.5 10 0.8 0.8 0.8 0.8 0.5 0.8 0.8 0.8 0.8 0.8 0.8 0.5 0.8 0.5 0.8 0.5 0.5 0.8 0.5 0.5 0.5 0.8 0.5 0.5 0.8 0.5 0.5 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 | 6    | ממממממממממממממממ מממ מממעצטט |

SAMPLE NO.

MW-20S

| Project: RFA254                 | Date Sampled: 10/14/98              |
|---------------------------------|-------------------------------------|
| Lab Code: COMPU Case No.: 33902 | SAS No.: SDG No.: 25403             |
| Matrix: (soil/water) WATER      | Lab Sample ID: 914777               |
| Sample wt/vol: 25.0 (g/mL) ML   | Lab File ID: CN014777A56.D          |
| Level: (low/med) LOW            | Date Received: 10/17/98             |
| % Moisture: not dec.            | Date Analyzed: 10/23/98             |
| GC Column:DB624 ID: 0.53 (mm)   | Dilution Factor: 1.0                |
| Soil Extract Volume:(uL)        | Soil Aliquot Volume:(uL)            |
| CAS NO. COMPOUND                | CONCENTRATION UNITS: UG/L DL CONC Q |
| 1330-20-7Xylene (total)         | 0.5 U                               |

MW-20SMS

Q

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25403

Matrix: (soil/water) WATER Lab Sample ID: 914771

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014771A54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 10/24/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CAS NO. COMPOUND CONCENTRATION UNITS: UG/L
DL CONC

74-83-9-----Bromomethane
0.5
6
75-01-4-----Vinyl Chloride
1
6

| 74-83-9Bromomethane                 | 0.5 | 6   | ]   |
|-------------------------------------|-----|-----|-----|
| 75-01-4Vinyl Chloride               | 1   | 6   |     |
| 75-00-3Chloroethane                 | 0.5 | 6   | İ   |
| 75-09-2Methylene Chloride           | 15  | 6   | JB  |
| 75-35-41,1-Dichloroethene           | 0.8 | 6   | İ   |
| 75-34-31,1-Dichloroethane           | 0.5 | 6   |     |
| 67-66-3Chloroform                   | 0.8 | 6   |     |
| 107-06-21,2-Dichloroethane          | 0.8 | 5   |     |
| 71-55-61,1,1-Trichloroethane        | 0.8 | 8   |     |
| 56-23-5Carbon Tetrachloride         | 1   | 6   |     |
| 75-27-4Bromodichloromethane         | 0.5 | 5   |     |
| 10061-01-5cis-1,3-Dichloropropene   | 0.5 | 5   |     |
| 79-01-6Trichloroethene              | 0.8 | 10  |     |
| 124-48-1Dibromochloromethane        | 0.5 | 5   |     |
| 79-00-51,1,2-Trichloroethane        | 0.8 | 5   |     |
| 71-43-2Benzene                      | 0.8 | 6   |     |
| 10061-02-6trans-1,3-Dichloropropene | 0.8 | 4   | [   |
| 75-25-2Bromoform                    | 0.5 | 5   |     |
| 127-18-4Tetrachloroethene           | 0.8 | 5   | Í   |
| 79-34-51,1,2,2-Tetrachloroethane    | 0.5 | 6 ( |     |
| 108-88-3Toluene                     | 0.8 | 5   |     |
| 108-90-7Chlorobenzene               | 0.5 | 5   | 1   |
| 100-41-4Ethylbenzene                | 0.5 | 6   | l   |
| 100-42-5Styrene                     | 0.5 | 5   | j   |
| 78-87-51,2-Dichloropropane          | 0.8 | 5   | 1   |
| 74-87-3Chloromethane                | 1   | 6   | 1   |
| 75-15-0Carbon disulfide             | 0.5 | 6   |     |
| 67-64-1Acetone                      | 5   | 24  | В   |
| 108-10-14-Methyl-2-pentanone        | 2   | 25  |     |
| 591-78-62-hexanone                  | 2   | 26  | . } |
| 78-93-32-butanone                   | 3   | 24  | {   |
| 156-60-5trans-1,2-Dichloroethene    | 0.8 | 6   | ĺ   |
| 156-59-2cis-1,2-Dichloroethene      | 0.5 | 6   | Ì   |
|                                     |     |     | - 1 |

1330-20-7-----Xylene (total)

SAMPLE NO.

18

MW-20SMS

0.5

Date Sampled: 10/14/98 Project: RFA254 Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25403 Matrix: (soil/water) WATER Lab Sample ID: 914771 25.0 (g/mL) ML Lab File ID: CN014771A54.D Sample wt/vol: Level: (low/med) LOW Date Received: 10/17/98 % Moisture: not dec. \_\_\_\_\_. Date Analyzed: 10/24/98 GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 1.0 Soil Aliquot Volume: (uL) Soil Extract Volume: \_\_\_\_(uL) CONCENTRATION UNITS: UG/L COMPOUND CAS NO. Q

MW-20SMSD

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25403

Matrix: (soil/water) WATER Lab Sample ID: 914772

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014772A54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. Date Analyzed: 10/24/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: UG/L CAS NO. COMPOUND DL CONC

|          |                           |       |             | ~  |
|----------|---------------------------|-------|-------------|----|
| 74 02 0  | Bromomethane              | 0.5   | 5           |    |
|          | Vinyl Chloride            | 1     | 5           |    |
|          | Chloroethane              | I - I | 6           |    |
|          |                           | 0.5   | 7           | JВ |
|          | Methylene Chloride        | 0.8   | 5           | UB |
|          | 1,1-Dichloroethane        | 0.5   | 5           |    |
|          | Chloroform                | l t   | 5           | 1  |
|          |                           | 0.8   | 5<br>5      | 1  |
|          | 1,2-Dichloroethane        | 0.8   | 5<br>7      |    |
|          | 1,1,1-Trichloroethane     | 0.8   | •           | 1  |
|          | Carbon Tetrachloride      | 1     | 5<br>5<br>5 |    |
|          | Bromodichloromethane      | 0.5   | 5           |    |
|          | cis-1,3-Dichloropropene   | 0.5   |             |    |
|          | Trichloroethene           | 0.8   | 8           |    |
|          | Dibromochloromethane      | 0.5   | 5           | }  |
|          | 1,1,2-Trichloroethane     | 0.8   | 5           |    |
| 71-43-2  |                           | 0.8   | 5           |    |
|          | trans-1,3-Dichloropropene | 0.8   | 5           |    |
|          | Bromoform                 | 0.5   | 5           |    |
| _        | Tetrachloroethene         | 0.8   | 5           |    |
|          | 1,1,2,2-Tetrachloroethane | 0.5   | 6           |    |
| 108-88-3 |                           | 0.8   | 5           |    |
|          | Chlorobenzene             | 0.5   | 5           |    |
|          | Ethylbenzene              | 0.5   | 5 ,         |    |
| 100-42-5 |                           | 0.5   | 5           |    |
|          | 1,2-Dichloropropane       | 0.8   | 5           |    |
| 74-87-3  | Chloromethane             | 1     | 6           |    |
| 75-15-0  | Carbon disulfide          | 0.5   | 6           |    |
| 67-64-1  | Acetone                   | 5     | 24          | В  |
| 108-10-1 | 4-Methyl-2-pentanone      | 2     | 25          |    |
| 591-78-6 | 2-hexanone                | 2     | 28          |    |
| 78-93-3  | 2-butanone                | 3     | 26          |    |
| 156-60-5 | trans-1,2-Dichloroethene  | 0.8   | 5           |    |
|          | cis-1,2-Dichloroethene    | 0.5   | 5           |    |
|          |                           |       |             |    |
|          |                           |       |             |    |

SAMPLE NO.

MW-20SMSD

Date Sampled: 10/14/98 Project: RFA254 SAS No.: SDG No.: 25403 Lab Code: COMPU Case No.: 33902 Matrix: (soil/water) WATER Lab Sample ID: 914772 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014772A54.D Level: (low/med) LOW Date Received: 10/17/98 % Moisture: not dec. Date Analyzed: 10/24/98 GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 1.0 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL) CONCENTRATION UNITS: UG/L CAS NO. COMPOUND CONC Q 1330-20-7-----Xylene (total) 0.5 17

| MWA-1 |  |
|-------|--|
|       |  |

Project: RFA254 Date Sampled: 10/15/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25403

Matrix: (soil/water) WATER Lab Sample ID: 914774

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CR014774B54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_ Date Analyzed: 10/24/98

GC Column: SP624 ID: 0.53 (mm) Dilution Factor: 56.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CAS NO. COMPOUND CONCENTRATION UNITS: UG/L
CAS NO. COMPOUND DL CONC

|          |                                |               |     | ~   |
|----------|--------------------------------|---------------|-----|-----|
| 74 92 9  | Bromomethane                   | 28            |     | U   |
|          | Vinyl Chloride                 | 56            |     | Ü   |
| 75-01-4  | Vinyi Chioride<br>Chloroethane |               | 1   | U   |
|          |                                | 28            | 45  | _   |
|          | Methylene Chloride             | 840           | 45  | 1 - |
|          | 1,1-Dichloroethene             | 42            | 63  | Ū   |
|          | 1,1-Dichloroethane             | 28            | 63  |     |
|          | Chloroform                     | 42            | [   | Ū   |
|          | 1,2-Dichloroethane             | 42            | 100 | ט   |
|          | 1,1,1-Trichloroethane          | 42            | 470 | ľ   |
|          | Carbon Tetrachloride           | 56            |     | Ū   |
|          | Bromodichloromethane           | 28            |     | U   |
|          | cis-1,3-Dichloropropene        | 28            |     | υ,  |
|          | Trichloroethene                | 42            | 150 | 1   |
|          | Dibromochloromethane           | 28            |     | U   |
|          | 1,1,2-Trichloroethane          | 42            |     | U   |
| 71-43-2  |                                | 42            |     | U   |
|          | trans-1,3-Dichloropropene      | 42            |     | U   |
|          | Bromoform                      | 28            |     | U   |
| 127-18-4 | Tetrachloroethene              | 42            | 770 | }   |
|          | 1,1,2,2-Tetrachloroethane      | 28            |     | U   |
| 108-88-3 |                                | 42            |     | U . |
| 108-90-7 | Chlorobenzene                  | 28            |     | U   |
| 100-41-4 | Ethylbenzene                   | 28            |     | U   |
| 100-42-5 | Styrene                        | 28            |     | U . |
| 78-87-5  | 1,2-Dichloropropane            | 42            |     | U   |
| 74-87-3  | Chloromethane                  | 56            |     | U   |
| 75-15-0  | Carbon disulfide               | 28            | 1   | ប   |
| 67-64-1  |                                | 280           | 67  | JB  |
|          | 4-Methyl-2-pentanone           | 110           |     | Ū   |
|          | 2-hexanone                     | 110           |     | Ū   |
|          | 2-butanone                     | 170           |     | Ū   |
|          | trans-1,2-Dichloroethene       | 42            |     | Ŭ   |
|          | cis-1,2-Dichloroethene         | 28            | 150 | _   |
|          |                                | 20            |     |     |
|          |                                | _ <del></del> |     |     |

MWA-1

SAMPLE NO.

Date Sampled: 10/15/98 Project: RFA254 SDG No.: 25403 Lab Code: COMPU Case No.: 33902 SAS No.: Matrix: (soil/water) WATER Lab Sample ID: 914774 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CR014774B54.D Level: (low/med) LOW Date Received: 10/17/98 % Moisture: not dec. \_\_\_\_\_ Date Analyzed: 10/24/98 Dilution Factor: 56.0 GC Column:SP624 ID: 0.53 (mm) Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: (uL) CONCENTRATION UNITS: UG/L CAS NO. COMPOUND CONC Q 1330-20-7-----Xylene (total)\_\_\_\_\_ 28 U

Q

# VOLATILE ORGANICS ANALYSIS DATA SHEET

THE ORGANICS ANALYSIS DATA SHEET

MWA-4

Project: RFA254 Date Sampled: 10/15/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25403

Matrix: (soil/water) WATER Lab Sample ID: 914775

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CR014775B54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. Date Analyzed: 10/24/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 833.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: UG/L CAS NO. COMPOUND DL CONC

74-83-9-----Bromomethane 420 U 75-01-4-----Vinyl Chloride 830 U 75-00-3-----Chloroethane 420 940 75-09-2----Methylene Chloride 12000 870 JB 75-35-4----1,1-Dichloroethene 620 U 75-34-3----1,1-Dichloroethane 420 U 67-66-3-----Chloroform 620 U 107-06-2----1,2-Dichloroethane 620 U 71-55-6----1,1,1-Trichloroethane 620 U 56-23-5-----Carbon Tetrachloride. 830 U 75-27-4----Bromodichloromethane U 420 U 10061-01-5----cis-1,3-Dichloropropene 420 79-01-6-----Trichloroethene 620 13000 124-48-1-----Dibromochloromethane 420 U 79-00-5----1,1,2-Trichloroethane 620 U 71-43-2----Benzene 620 210 J 10061-02-6----trans-1,3-Dichloropropene 620 U 75-25-2----Bromoform 420 U 127-18-4-----Tetrachloroethene 620 U 79-34-5----1,1,2,2-Tetrachloroethane 420 U 108-88-3-----Toluene 620 U 108-90-7-----Chlorobenzene 420 H 100-41-4-----Ethylbenzene\_ 420 U 100-42-5----Styrene U 420 78-87-5----1,2-Dichloropropane 620 U 74-87-3-----Chloromethane 830 560 J 75-15-0-----Carbon disulfide 420 U 67-64-1-----Acetone 4200 4100 JB 108-10-1-----4-Methyl-2-pentanone 1700 U 591-78-6----2-hexanone 1700 470 J 78-93-3-----2-butanone 2500 2100 JB 156-60-5-----trans-1,2-Dichloroethene 620 U 156-59-2-----cis-1,2-Dichloroethene 7000 420

1330-20-7-----Xylene (total) \_\_\_\_

MWA-4

420

SAMPLE NO.

U

Date Sampled: 10/15/98 Project: RFA254 Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25403 Matrix: (soil/water) WATER Lab Sample ID: 914775 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CR014775B54.D Level: (low/med) LOW Date Received: 10/17/98 % Moisture: not dec. Date Analyzed: 10/24/98 ID: 0.53 (mm) Dilution Factor: 833.0 GC Column: SP624 Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL) CONCENTRATION UNITS: UG/L CAS NO. COMPOUND CONC Q

FORM I VOA

PZ-15I

Q

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25403

Matrix: (soil/water) WATER Lab Sample ID: 914888

Sample wt/vol: 25.0 (q/mL) ML Lab File ID: CR014888A54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. Date Analyzed: 10/24/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 2.5

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: UG/L CAS NO. COMPOUND DL CONC

74-83-9-----Bromomethane 1 U 75-01-4-----Vinyl Chloride 2 U U 75-00-3-----Chloroethane 1 75-09-2----Methylene Chloride 38 JB 75-35-4-----1,1-Dichloroethene 2 0.7 J 75-34-3-----1,1-Dichloroethane 1 10 2 67-66-3-----Chloroform U 107-06-2----1, 2-Dichloroethane 2 J 1 2 9 71-55-6----1,1,1-Trichloroethane 2 56-23-5-----Carbon Tetrachloride U 75-27-4-----Bromodichloromethane 1 IJ 10061-01-5----cis-1,3-Dichloropropene 1 U 2 79-01-6-----Trichloroethene 4 1 124-48-1-----Dibromochloromethane U 79-00-5----1,1,2-Trichloroethane 2 U 2 71-43-2-----Benzene U 2 10061-02-6----trans-1,3-Dichloropropene U 75-25-2----Bromoform 1 U 2 127-18-4-----Tetrachloroethene 33 79-34-5-----1,1,2,2-Tetrachloroethane 1 IJ 108-88-3-----Toluene 2 U 1 108-90-7-----Chlorobenzene U 1 U 100-41-4-----Ethylbenzene U 100-42-5----Styrene 1 2 U 78-87-5----1,2-Dichloropropane 2 U 74-87-3-----Chloromethane 1 75-15-0-----Carbon disulfide 67-64-1-----Acetone 12 JB 108-10-1----4-Methyl-2-pentanone 5 U 5 591-78-6----2-hexanone U 78-93-3----2-butanone 8 U 156-60-5----trans-1,2-Dichloroethene 2 U 156-59-2----cis-1,2-Dichloroethene 0.8 J

SAMPLE NO.

PZ-15I

| Project: RFA254      |                 |         | Date Sampled: 3     | 10/14/98            |            |
|----------------------|-----------------|---------|---------------------|---------------------|------------|
| Lab Code: COMPU      | Case No.: 33902 | SAS No. | : SDG I             | No.: 25403          |            |
| Matrix: (soil/water) | WATER           |         | Lab Sample ID:      | 914888              |            |
| Sample wt/vol:       | 25.0 (g/mL) ML  |         | Lab File ID:        | CR014888A54.D       |            |
| Level: (low/med)     | LOW             |         | Date Received:      | 10/17/98            |            |
| % Moisture: not dec. |                 |         | Date Analyzed:      | 10/24/98            |            |
| GC Column:SP624      | ID: 0.53 (mm)   |         | Dilution Factor     | c: 2.5              |            |
| Soil Extract Volume: | (uL)            |         | Soil Aliquot Vo     | olume:(ul           | <b>L</b> ) |
| CAS NO.              | COMPOUND        |         | CONCENTRATION<br>DL | UNITS: UG/L<br>CONC | Q          |
| 1330-20-7Xyl         | ene (total)     |         | 1                   |                     | U          |

PZ-17D

Project: RFA254 Date Sampled: 10/15/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25403

Matrix: (soil/water) WATER Lab Sample ID: 914770

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014770A56.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. Date Analyzed: 10/23/98

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: UG/L
CAS NO. COMPOUND DL CONC

| 74-83-9  | Bromomethane              | 0.5 |     | U  |
|----------|---------------------------|-----|-----|----|
|          | Vinyl Chloride            | 1   |     | Ū  |
|          | Chloroethane              | 0.5 |     | Ū  |
|          | Methylene Chloride        | 10  | 1   | JB |
|          | 1,1-Dichloroethene        | 0.8 | 2   | "  |
| 75-34-3  | 1,1-Dichloroethane        | 0.5 | 3   |    |
|          | Chloroform                | 0.8 |     | U  |
|          | 1,2-Dichloroethane        | 0.8 |     | Ū  |
|          | 1,1,1-Trichloroethane     | 0.8 | 17  |    |
|          | Carbon Tetrachloride      | 1   |     | U  |
|          | Bromodichloromethane      | 0.5 |     | Ū  |
|          | cis-1,3-Dichloropropene   | 0.5 |     | Ū  |
|          | Trichloroethene           | 0.8 | 270 | E  |
|          | Dibromochloromethane      | 0.5 |     | Ū  |
|          | 1,1,2-Trichloroethane     | 0.8 |     | Ū  |
| 71-43-2  |                           | 0.8 |     | Ū  |
|          | trans-1,3-Dichloropropene | 0.8 |     | Ū  |
| 75-25-2  |                           | 0.5 |     | U  |
|          | Tetrachloroethene         | 0.8 | 120 | E  |
| 79-34-5  | 1,1,2,2-Tetrachloroethane | 0.5 |     | U  |
| 108-88-3 |                           | 0.8 |     | U  |
| 108-90-7 | Chlorobenzene             | 0.5 |     | U  |
| 100-41-4 | Ethylbenzene              | 0.5 |     | U  |
| 100-42-5 |                           | 0.5 |     | U  |
| 78-87-5  | 1,2-Dichloropropane       | 0.8 |     | U  |
| 74-87-3  | Chloromethane             | 1   |     | U  |
| 75-15-0  | Carbon disulfide          | 0.5 | 0.5 |    |
| 67-64-1  | Acetone                   | 5   | 1   | JΒ |
| 108-10-1 | 4-Methyl-2-pentanone      | 2   |     | U  |
| 591-78-6 | 2-hexanone                | 2   | }   | U  |
| 78-93-3  | 2-butanone                | 3   |     | U  |
| 156-60-5 | trans-1,2-Dichloroethene  | 0.8 | 0.5 | J  |
| 156-59-2 | cis-1,2-Dichloroethene    | 0.5 | 60  | E  |
|          |                           |     |     |    |
|          |                           |     |     |    |

PZ-17D

SAMPLE NO.

Date Sampled: 10/15/98 Project: RFA254 Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25403 Matrix: (soil/water) WATER Lab Sample ID: 914770 Lab File ID: CN014770A56.D Sample wt/vol: 25.0 (g/mL) ML Level: (low/med) Date Received: 10/17/98 LOW % Moisture: not dec. Date Analyzed: 10/23/98 GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0 Soil Aliquot Volume: (uL) Soil Extract Volume: \_\_\_\_(uL) CONCENTRATION UNITS: UG/L CAS NO. COMPOUND Q 1330-20-7-----Xylene (total) 0.5 U

0

### VOLATILE ORGANICS ANALYSIS DATA SHEET

PZ-17DDL

Project: RFA254 Date Sampled: 10/15/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25403

Matrix: (soil/water) WATER Lab Sample ID: 914770

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CR014770B54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 10/24/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 17.0

Soil Extract Volume: (uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: UG/L
CAS NO. COMPOUND DL CONC

| CAS NO.    | COMPOUND                  | םת  | CONC | ×  |
|------------|---------------------------|-----|------|----|
| 74-83-9    | Bromomethane              | 8   |      | U  |
|            | Vinyl Chloride            | 17  |      | Ü  |
|            | Chloroethane              | 8   |      | Ū  |
|            | Methylene Chloride        | 260 |      | Ū  |
|            | 1,1-Dichloroethene        | 13  |      | ΙŪ |
|            | 1,1-Dichloroethane        | 8   |      | Ū  |
|            | Chloroform                | 13  |      | Ū  |
|            | 1,2-Dichloroethane        | 13  |      | Ū  |
|            | 1,1,1-Trichloroethane     | 13  | 16   | 3  |
|            | Carbon Tetrachloride      | 17  | 20   | Ū  |
|            | Bromodichloromethane      | 8   |      | Ū  |
|            | cis-1,3-Dichloropropene   | 8   |      | Ū  |
|            | Trichloroethene           | 13  | 340  | II |
|            | Dibromochloromethane      | 8   |      | ט  |
| 79-00-5    | 1,1,2-Trichloroethane     | 13  |      | ַ  |
| 71-43-2    | Benzene                   | 13  |      | ט  |
| 10061-02-6 | trans-1,3-Dichloropropene | 13  |      | ט  |
| 75-25-2    |                           | 8   |      | U  |
| 127-18-4   | Tetrachloroethene         | 13  | 80   | D  |
| 79-34-5    | 1,1,2,2-Tetrachloroethane | 8   |      | U  |
| 108-88-3   |                           | 13  |      | U  |
|            | Chlorobenzene             | 8   | •    | U  |
| 100-41-4   | Ethylbenzene              | 8   |      | U  |
| 100-42-5   |                           | 8   |      | U  |
|            | 1,2-Dichloropropane       | 13  |      | U  |
|            | Chloromethane             | 17  |      | U  |
|            | Carbon disulfide          | 8   |      | U  |
| 67-64-1    |                           | 85  |      | U  |
|            | 4-Methyl-2-pentanone      | 34  |      | Ŭ  |
|            | 2-hexanone                | 34  |      | U  |
|            | 2-butanone                | 51  |      | U  |
|            | trans-1,2-Dichloroethene  | 13  |      | U  |
| 156-59-2   | cis-1,2-Dichloroethene    | 8   | 72   | D  |

PZ-17DDL

SAMPLE NO.

Date Sampled: 10/15/98 Project: RFA254 Lab Code: COMPU Case No.: 33902 SDG No.: 25403 SAS No.: Matrix: (soil/water) WATER Lab Sample ID: 914770 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CR014770B54.D Date Received: 10/17/98 Level: (low/med) LOW % Moisture: not dec. Date Analyzed: 10/24/98 GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 17.0 Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL) CONCENTRATION UNITS: UG/L CAS NO. COMPOUND Q 1330-20-7-----Xylene (total)\_\_\_ 8 U

SAMPLE NO.

PZ-17I

Project: RFA254 Date Sampled: 10/15/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25403

Matrix: (soil/water) WATER Lab Sample ID: 914773

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C2R14773A54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. Date Analyzed: 10/24/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 40.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

|                                     | 1    |     | 1   |
|-------------------------------------|------|-----|-----|
| 74-83-9Bromomethane                 | 20   |     | U   |
| 75-01-4Vinyl Chloride               | 40   |     | U   |
| 75-00-3Chloroethane                 | 20   |     | U   |
| 75-09-2Methylene Chloride           | 600. | 37  | JВ  |
| 75-35-41,1-Dichloroethene           | 30   |     | U   |
| 75-34-31,1-Dichloroethane           | 20   |     | U   |
| 67-66-3Chloroform                   | 30   |     | U   |
| 107-06-21,2-Dichloroethane          | 30   |     | Ū   |
| 71-55-61,1,1-Trichloroethane        | 30   | 12  | J   |
| 56-23-5Carbon Tetrachloride         | 40   |     | U   |
| 75-27-4Bromodichloromethane         | 20   |     | U   |
| 10061-01-5cis-1,3-Dichloropropene   | 20   |     | U   |
| 79-01-6Trichloroethene              | 30   | 66  | ĺ   |
| 124-48-1Dibromochloromethane        | 20   |     | U   |
| 79-00-51,1,2-Trichloroethane        | 30   |     | U   |
| 71-43-2Benzene                      | 30   |     | U   |
| 10061-02-6trans-1,3-Dichloropropene | 30   |     | U   |
| 75-25-2Bromoform                    | 20   |     | U   |
| 127-18-4Tetrachloroethene           | 30   | 780 |     |
| 79-34-51,1,2,2-Tetrachloroethane    | 20   |     | U   |
| 108-88-3Toluene                     | 30   |     | U   |
| 108-90-7Chlorobenzene               | 20   |     | U   |
| 100-41-4Ethylbenzene                | 20   |     | ט   |
| 100-42-5Styrene                     | 20   |     | U   |
| 78-87-51,2-Dichloropropane          | 30   |     | U   |
| 74-87-3Chloromethane                | 40   |     | ט   |
| 75-15-0Carbon disulfide             | 20   |     | ַ ט |
| 67-64-1Acetone                      | 200  | 59  | JB  |
| 108-10-14-Methyl-2-pentanone        | 80   |     | Ŭ [ |
| 591-78-62-hexanone                  | 80   |     | U [ |
| 78-93-32-butanone                   | 120  |     | U . |
| 156-60-5trans-1,2-Dichloroethene    | 30   | Į"  | U   |
| 156-59-2cis-1,2-Dichloroethene      | 20   | 23  |     |
|                                     | ĺ    | ĺ   | 1   |

PZ-17I

SAMPLE NO.

Project: RFA254 Date Sampled: 10/15/98 Case No.: 33902 SAS No.: Lab Code: COMPU SDG No.: 25403 Matrix: (soil/water) WATER Lab Sample ID: 914773 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C2R14773A54.D Level: (low/med) LOW Date Received: 10/17/98 % Moisture: not dec. Date Analyzed: 10/24/98 GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 40.0 Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL) CONCENTRATION UNITS: UG/L COMPOUND CAS NO. Q 1330-20-7-----Xylene (total) 20 U

SPARGEH2O

Project: RFA254 Date Sampled: 10/15/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25403

Matrix: (soil/water) WATER Lab Sample ID: 914776

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CR014776A54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_ Date Analyzed: 10/24/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: UG/L
CAS NO. COMPOUND DL CONC

| CAS NO.            | COMPOUND                  | חח  | CONC | Q   |
|--------------------|---------------------------|-----|------|-----|
| 74-83-9            | Bromomethane              | 0.5 |      | U   |
|                    | Vinyl Chloride            | 1   |      | Ū   |
|                    | Chloroethane              | 0.5 |      | Ū   |
| 75-09-2            | Methylene Chloride        | 15  | 2    | JВ  |
|                    | 1,1-Dichloroethene        | 0.8 |      | U   |
|                    | 1,1-Dichloroethane        | 0.5 |      | U   |
|                    | Chloroform                | 0.8 |      | U   |
| 107-06-2           | 1,2-Dichloroethane        | 0.8 |      | U   |
| 71-55-6            | 1,1,1-Trichloroethane     | 0.8 |      | U   |
| 56-23-5            | Carbon Tetrachloride      | 1   |      | U   |
|                    | Bromodichloromethane      | 0.5 |      | U   |
| 10061-01-5         | cis-1,3-Dichloropropene   | 0.5 | •    | Ū   |
| 79-01-6            | Trichloroethene           | 0.8 | 0.3  | J   |
|                    | Dibromochloromethane      | 0.5 |      | U   |
| 79-00-5            | 1,1,2-Trichloroethane     | 0.8 |      | U   |
| 71-43-2            |                           | 0.8 |      | U   |
|                    | trans-1,3-Dichloropropene | 0.8 |      | U   |
|                    | Bromoform_                | 0.5 |      | U   |
|                    | Tetrachloroethene         | 0.8 | 5    | i   |
|                    | 1,1,2,2-Tetrachloroethane | 0.5 | Í    | U   |
| 108-88-3- <b>-</b> |                           | 0.8 |      | U   |
|                    | Chlorobenzene             | 0.5 |      | ָ ט |
|                    | Ethylbenzene              | 0.5 |      | U   |
| 100-42-5           |                           | 0.5 |      | U   |
|                    | 1,2-Dichloropropane       | 0.8 |      | ַ ט |
|                    | Chloromethane             | 1   |      | U   |
|                    | Carbon disulfide          | 0.5 | r    | ט   |
| 67-64-1            |                           | 5   |      | В   |
|                    | 4-Methyl-2-pentanone      | . 2 |      | U   |
|                    | 2-hexanone                | 2   |      | U   |
|                    | 2-butanone                | 3   |      | J   |
|                    | trans-1,2-Dichloroethene  | 0.8 |      | U   |
| 156-59-2           | cis-1,2-Dichloroethene    | 0.5 |      | U   |
|                    |                           |     | [    |     |
|                    |                           |     |      |     |

1330-20-7-----Xylene (total)

SAMPLE NO.

U

SPARGEH2O

0.5

Date Sampled: 10/15/98 Project: RFA254 Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25403 Matrix: (soil/water) WATER Lab Sample ID: 914776 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CR014776A54.D Level: (low/med) LOW Date Received: 10/17/98 % Moisture: not dec. Date Analyzed: 10/24/98 ID: 0.53 (mm) Dilution Factor: 1.0 GC Column:SP624 Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: (uL) CONCENTRATION UNITS: UG/L CAS NO. COMPOUND CONC

### VOLATILE METHOD BLANK SUMMARY

**VBLKKS** 

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25403

Lab File ID: CB981024A54.D

Lab Sample ID: VBLKKS

Date Analyzed: 10/24/98

Time Analyzed: 1121

GC Column:SP624 ID: 0.53 (mm)

Heated Purge: (Y/N) N

Instrument ID: F50054

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

| }   |             | LAB                                     | LAB            | TIME     |
|-----|-------------|---|----------------|----------|
| . [ | SAMPLE NO.  | SAMPLE ID                               | FILE ID        | ANALYZED |
| ĺ   | ==========  |   | ==========     |          |
| 01  | VLCS34      | 916243                                  | CN016243A54.D  | 1213     |
| 02  | PZ-17I      | 914773                                  | C2R14773A54.D  | 1309     |
| 03  | PZ-15I      | 914888                                  | CR014888A54.D  | 1340     |
| 04  | SPARGEH2O   | 914776                                  | CR014776A54.D  | 1427     |
|     | MW-20SMS    | 914771                                  | CN014771A54.D  | 1518     |
|     | MW-20SMSD   | 914772                                  | CN014772A54.D  | 1548     |
| 07  | 200         | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 01101177213113 | 1010     |
| 08  |             |   |                |          |
| 09  |             |   |                |          |
| 10  |             |   | <del></del>    |          |
| 11  |             |   | <del></del> -  |          |
| 12  |             |   |                |          |
| 13  | <del></del> |   | <del></del>    |          |
| 14  |             |   |                |          |
| 15  |             |   |                |          |
| 16  |             |   |                |          |
| 17  |             |   |                |          |
| 18  |             |   |                |          |
| 19  |             |   |                |          |
| 20  |             |   |                |          |
| 21  |             |   |                |          |
| 22  |             |   |                |          |
| 23  |             |   |                |          |
| 24  |             |   |                |          |
| 25  |             |   |                |          |
| 26  |             |   |                |          |
| 27  |             |   |                |          |
| 28  |             |   |                |          |
| 29  |             |   |                |          |
| 30  |             |   |                |          |

| COMMENTS: |      |                 |
|-----------|------|-----------------|
|           | <br> | <br><del></del> |
|           | <br> | <br>            |

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

| VBLKK: | S |
|--------|---|
|        |   |

SAMPLE NO.

|   | · · · · · · · · · · · · · · · · · · ·  |
|---|--|
| Project: RFA254                         | Date Sampled:  |
| Lab Code: COMPU Case No.: 33902 SAS No. | : SDG No.: 25403   |
| Matrix: (soil/water) WATER              | Lab Sample ID: VBLKKS  |
| Sample wt/vol: 25.0 (g/mL) ML           | Lab File ID: CB981024A54.D   |
| Level: (low/med) LOW                    | Date Received:   |
| % Moisture: not dec.                    | Date Analyzed: 10/24/98  |
| GC Column:SP624 ID: 0.53 (mm)           | Dilution Factor: 1.0   |
| Soil Extract Volume:(uL)                | Soil Aliquot Volume:(uL)   |
| CAS NO. COMPOUND                        | CONCENTRATION UNITS: UG/L DL CONC Q  |
| 74-83-9Bromomethane 75-01-4             | 0.5<br>1 0.5<br>0.8<br>0.8<br>0.8<br>0.8<br>0.8<br>0.8<br>0.8<br>0.5<br>0.8<br>0.8<br>0.5<br>0.8<br>0.8<br>0.5<br>0.8<br>0.8<br>0.9<br>0.9<br>0.9<br>0.9<br>0.9<br>0.9<br>0.9<br>0.9 |

#### 1A VOLATILE ORGANICS ANALYSIS DATA SHEET

| VBLKKS |  |
|--------|--|
|        |  |

SAMPLE NO.

| Project: RFA254      |                 |          | Date Sampled:    |                     |    |
|----------------------|-----------------|----------|------------------|---------------------|----|
| Lab Code: COMPU      | Case No.: 33902 | SAS No.: | SDG 1            | No.: 25403          |    |
| Matrix: (soil/water) | WATER           |          | Lab Sample ID:   | VBLKKS              |    |
| Sample wt/vol:       | 25.0 (g/mL) ML  |          | Lab File ID:     | CB981024A54.D       | )  |
| Level: (low/med)     | LOW             | :        | Date Received:   |                     |    |
| % Moisture: not dec. |                 | :        | Date Analyzed:   | 10/24/98            |    |
| GC Column:SP624      | ID: 0.53 (mm)   | 1        | Dilution Factor  | : 1.0               |    |
| Soil Extract Volume: | (uL)            | :        | Soil Aliquot Vo  | olume:(u            | L) |
| CAS NO.              | COMPOUND        |          | CONCENTRATION DL | UNITS: UG/L<br>CONC | Q  |
| 1330-20-7XyI         | lene (total)    |          | 0.5              |                     | U  |

# VOLATILE METHOD BLANK SUMMARY

VBLKLT

Contract: 501112 Lab Name: COMPUCHEM

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25403

Lab File ID: CB981023B54.D

Lab Sample ID: VBLKLT

Date Analyzed: 10/23/98

Time Analyzed: 2156

GC Column:SP624 ID: 0.53 (mm)

Heated Purge: (Y/N) N

Instrument ID: F50054

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

| SAMPLE NO. SAMPLE ID FILE ID ANALY                                       |             |
|--|-------------|
|  |             |
|  | :====       |
| 01 VLCS06 916198 CN016198B54.D 2241                                      |             |
| 02 PZ-17DDL 914770 CR014770B54.D 0206                                    | -           |
| 03 MWA-1 914774 CR014774B54.D 0307<br>04 MWA-4 914775 CR014775B54.D 0337 | }           |
| 04 MWA-4 914775 CR014775B54.D 0337                                       |             |
| 06   |             |
| 07   |             |
| 08   |             |
| 09   |             |
| 10   |             |
| 11   |             |
| 12   |             |
| 13   |             |
| 14   15  |             |
| 16   | —— I        |
| 17   |             |
| 18   |             |
| 19   |             |
| 20   |             |
| 21   |             |
| 22   |             |
| 23   |             |
| 24 25  |             |
| 26   |             |
| 27   | ———         |
| 28   |             |
| 29   | <del></del> |
| 30   |             |

| COMMENTS: |      |             |      |
|-----------|------|-------------|------|
|           | <br> |             | <br> |
|           | <br> | <del></del> | <br> |

### 1A VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VBLKLT

|  |   |                                  | _ !    |
|--|---|----------------------------------|--------|
| Project:   | Date Sampled:   |                                  |        |
| Lab Code: COMPU Case No.: 33902 SAS No.  | : SDG   | No.: 25403                       |        |
| Matrix: (soil/water) WATER   | Lab Sample ID:  | VBLKLT                           |        |
| Sample wt/vol: 25.0 (g/mL) ML  | Lab File ID:  | CB981023B54.D                    |        |
| Level: (low/med) LOW   | Date Received:  |                                  |        |
| % Moisture: not dec  | Date Analyzed:  | 10/23/98                         |        |
| GC Column:SP624 ID: 0.53 (mm)  | Dilution Facto  | or: 1.0                          |        |
| Soil Extract Volume:(uL)   | Soil Aliquot V  | olume:(uL                        | )      |
| CAS NO. COMPOUND   | CONCENTRATION<br>DL   | UNITS: UG/L<br>CONC              | Q      |
| 74-83-9  | 0.5<br>10.5<br>0.8<br>0.8<br>0.8<br>0.8<br>0.8<br>0.8<br>0.8<br>0.8<br>0.8<br>0.8 |                                  |        |
| 74-87-3Chloromethane 75-15-0Carbon disulfide 67-64-1Acetone 108-10-14-Methyl-2-pentanone 591-78-62-hexanone 78-93-32-butanone 156-60-5trans-1,2-Dichloroethene | 0.5 5 2 2 3 0.8   | U<br>U<br>1 J<br>U<br>U<br>0.5 J | J<br>J |
| 156-59-2cis-1,2-Dichloroethene   | 0.5   | U                                |        |

### 1A VOLATILE ORGANICS ANALYSIS DATA SHEET

VBLKLT

SAMPLE NO.

| Project:             |                 |         | Date Sampled:       |                     |    |
|----------------------|-----------------|---------|---------------------|---------------------|----|
| Lab Code: COMPU      | Case No.: 33902 | SAS No. | : SDG               | No.: 25403          |    |
| Matrix: (soil/water) | WATER           | )       | Lab Sample ID:      | VBLKLT              |    |
| Sample wt/vol:       | 25.0 (g/mL) ML  |         | Lab File ID:        | CB981023B54.D       |    |
| Level: (low/med)     | LOW             |         | Date Received:      |                     |    |
| % Moisture: not dec. | ·               |         | Date Analyzed:      | 10/23/98            |    |
| GC Column:SP624      | ID: 0.53 (mm)   |         | Dilution Factor     | c: 1.0              |    |
| Soil Extract Volume: | (uL)            |         | Soil Aliquot Vo     | olume:(u            | L) |
| CAS NO.              | COMPOUND        |         | CONCENTRATION<br>DL | UNITS: UG/L<br>CONC | Q  |
| 1330-20-7Xy          | rlene (total)   |         | 0.5                 |                     | U  |

### VOLATILE METHOD BLANK SUMMARY

**VBLKRC** 

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25403

Lab File ID: CB981023A56.D

Lab Sample ID: VBLKRC

Date Analyzed: 10/23/98

Time Analyzed: 0906

GC Column:DB624 ID: 0.53 (mm)

Heated Purge: (Y/N) N

Instrument ID: F50056

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

|          | SAMPLE NO.  | LAB<br>SAMPLE ID                        | LAB<br>FILE ID | TIME<br>ANALYZED |
|----------|-------------|---|----------------|------------------|
|          | =========   | ======================================= | ==========     | ========         |
| 01       | VLCS71      | 915062                                  | CN015062A56.D  | 1002             |
| 02       | PZ-17D      | 914770                                  | CN014770A56.D  | 1101             |
| 03<br>04 | MW-20S      | 914777                                  | CN014777A56.D  | 1142             |
| 05       |             | ·                                       |                |                  |
| 06       |             |   |                |                  |
| 07       |             |   |                |                  |
| 08       |             |   |                |                  |
| 09       |             |   | · <del></del>  |                  |
| 10<br>11 |             |   |                |                  |
| 12       |             |   |                |                  |
| 13       |             |   |                |                  |
| 14       |             |   |                |                  |
| 15       |             |   |                |                  |
| 16<br>17 |             |   |                |                  |
| 18       | <del></del> |   | <del></del>    |                  |
| 19       |             |   |                |                  |
| 20       |             |   |                |                  |
| 21       |             |   |                |                  |
| 22       |             |   |                |                  |
| 24       |             |   |                |                  |
| 25       |             | <del></del>                             |                |                  |
| 26       |             |   |                |                  |
| 27       |             |   |                |                  |
| 28       |             |   |                |                  |
| 29       |             |   |                |                  |
| 30       |             |   |                |                  |

| COMMENTS: |   |                            | •                 |      |
|-----------|---|----------------------------|-------------------|------|
|           |   |                            | <br>              |      |
|           | • |                            |                   |      |
|           |   |                            |                   |      |
|           |   | <del>- ,     -      </del> | <br><del></del> - | <br> |

#### 1A VOLATILE ORGANICS ANALYSIS DATA SHEET

VBLKRC

SAMPLE NO.

Date Sampled: \_\_\_\_\_ Project: RFA254 Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25403 Lab Sample ID: VBLKRC Matrix: (soil/water) WATER Lab File ID: CB981023A56.D Sample wt/vol: 25.0 (g/mL) ML Date Received: Level: (low/med) LOW % Moisture: not dec. Date Analyzed: 10/23/98 GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0 Soil Aliquot Volume: (uL) Soil Extract Volume: (uL) CONCENTRATION UNITS: UG/L 0 CAS NO. COMPOUND U 0.5 74-83-9-----Bromomethane 75-01-4-----Vinyl Chloride Ū 1 75-00-3-----Chloroethane 0.5 U 0.9 J 75-09-2-----Methylene Chloride 10 75-35-4-----1,1-Dichloroethene 0.8 U 75-34-3-----1,1-Dichloroethane 0.5 U U 67-66-3-----Chloroform 0.8 107-06-2----1,2-Dichloroethane 0.8 U 71-55-6-----1,1,1-Trichloroethane 0.8 U 56-23-5-----Carbon Tetrachloride U 75-27-4-----Bromodichloromethane 0.5 U 10061-01-5----cis-1,3-Dichloropropene 0.5 U 0.8 U 79-01-6-----Trichloroethene U 124-48-1-----Dibromochloromethane 0.5 0.8 79-00-5-----1,1,2-Trichloroethane U 71-43-2----Benzene 0.8 U 10061-02-6-----trans-1,3-Dichloropropene 0.8 U 75-25-2----Bromoform 0.5 U 127-18-4-----Tetrachloroethene 0.8 U 79-34-5----1,1,2,2-Tetrachloroethane 0.5 U 108-88-3----Toluene 0.8 U 108-90-7-----Chlorobenzene 0.5 U 100-41-4----Ethylbenzene 0.5 U 100-42-5----Styrene 0.5 U 78-87-5-----1,2-Dichloropropane U 0.8 74-87-3-----Chloromethane U 1 75-15-0-----Carbon disulfide 0.5 U 67-64-1-----Acetone 5 2 | J 108-10-1-----4-Methyl-2-pentanone 2 U 591-78-6----2-hexanone 2 U 78-93-3----2-butanone 3 U 156-60-5----trans-1,2-Dichloroethene 0.8 U 156-59-2----cis-1,2-Dichloroethene 0.5

### 1A VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

| Project: RFA254                 | Date Sampled:                       |
|---------------------------------|-------------------------------------|
| Lab Code: COMPU Case No.: 33902 | SAS No.: SDG No.: 25403             |
| Matrix: (soil/water) WATER      | Lab Sample ID: VBLKRC               |
| Sample wt/vol: 25.0 (g/mL) M    | L Lab File ID: CB981023A56.D        |
| Level: (low/med) LOW            | Date Received:                      |
| % Moisture: not dec.            | Date Analyzed: 10/23/98             |
| GC Column:DB624 ID: 0.53 (mm)   | Dilution Factor: 1.0                |
| Soil Extract Volume:(uL)        | Soil Aliquot Volume:(uL)            |
| CAS NO. COMPOUND                | CONCENTRATION UNITS: UG/L DL CONC Q |
| 1330-20-7Xylene (total)         | 0.5                                 |

#### 2A WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: COMPUCHEM Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25403

|    | _ <del></del> | 0.407  | 01400  | OMOS.  | Com Table                              | T TOOM |
|----|---------------|--------|--------|--------|--|--------|
|    | 1             | SMC1   | SMC2   | SMC3   | OTHER                                  | TOT    |
|    | SAMPLE NO.    | (DBF)# | (TOL)# | (BFB)# |  | OUT    |
|    | =========     | ====== | ====== | =====  | =====                                  | ===    |
| 01 | MW-20S        | 110    | 111    | 82     |  | 0      |
| 02 | MW-20SMS      | 102    | 96     | 92     |  | 0      |
| 03 | MW-20SMSD     | 98     | 92     | 85     |  | 0      |
| 04 | MWA-1         | 91     | 92     | 84     |  | 0      |
| 05 | MWA-4         | 95     | 96     | 88     |  | 0      |
| 06 | PZ-15I        | 103    | 95     | 84     |  | 0      |
| 07 | PZ-17D        | 117    | 128    | 90     |  | 0      |
| 08 | PZ-17DDL      | 100    | 98     | 93     |  | 0      |
| 09 | PZ-17I        | 101    | 95     | 87     |  | 0      |
| 10 | SPARGEH2O     | 99     | 93     | 76     |  | o      |
| 11 | VBLKKS        | 94     | 97     | 92     |  | Ö      |
| 12 | VBLKLT        | 101    | 96     | 91     |  | ő      |
| 13 | VBLKRC        | 114    | 108    | 79     |  | 0      |
| 14 | VLCS06        | 97     | 98     | 96     |  | ŏ      |
| 15 | VLCS34        | 88     | 96     | 99     |  | ő      |
| 16 | VLCS71        | 102    | 97     | 100    | <del></del>                            | ől     |
| 17 | ADCOAT        | 102    | 31     | 100    |  | ١      |
| 18 |               |        |        |        |  |        |
| 19 |               | [      |        |        | [                                      |        |
|    | <u> </u>      |        |        |        |  | 1      |
| 20 |               |        |        |        |  |        |
| 21 |               |        | [      |        |  |        |
| 22 |               |        |        |        | <u> </u>                               |        |
| 23 |               |        |        |        |  |        |
| 24 |               |        |        |        |  |        |
| 25 |               |        |        |        |  |        |
| 26 |               |        |        |        |  |        |
| 27 |               |        |        |        |  |        |
| 28 |               |        |        |        |  |        |
| 29 |               |        |        |        |  |        |
| 30 |               |        |        |        |  | —-     |
|    |               |        |        | ··     | ······································ | ·      |

SMC1 (DBF) = Dibromofluoromethane (70-130) SMC2 (TOL) = Toluene-d8 (70-130) SMC3 (BFB) = Bromofluorobenzene (70-130)

- # Column to be used to flag recovery values
- \* Values outside of contract required QC limits
- D System Monitoring Compound diluted out

#### 3A WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25403

Matrix Spike - Sample No.: MW-20S

|   | SPIKE   | SAMPLE        | MS                                   | MS    | QC.    |
|---|---------|---------------|--------------------------------------|-------|--------|
|   | ADDED   | CONCENTRATION | CONCENTRATION                        | %     | LIMITS |
| COMPOUND                                | (ug/L)  | (ug/L)        | (ug/L)                               | REC # | REC.   |
| ======================================= | ======= | ==========    | ==================================== | ===== | ====== |
| Bromomethane                            | 5.00    | 0.000         | 5.89                                 | 118   | 20-150 |
| Vinyl Chloride                          | 5.00    | 0.000         | 5.50                                 | 110   | 20-150 |
| Chloroethane                            | 5.00    | 0.000         | 5.93                                 | 119   | 20-150 |
| Methylene Chloride                      | 5.00    | 1.90          | 6.18                                 | 86    | 20-300 |
| 1,1-Dichloroethene                      | 5.00    | 0.000         | 5.82                                 | 116   | 20-150 |
| 1,1-Dichloroethane                      | 5.00    | 0.000         | 5.73                                 | 115   | 20-150 |
| Chloroform                              | 5.00    | 0.000         | 5.76                                 | 115   | 20-150 |
| 1,2-Dichloroethane                      | 5.00    | 0.000         | 4.88                                 | 98    | 20-150 |
| 1,1,1-Trichloroethane                   | 5.00    | 2.89          | 7.75                                 | 97    | 20-150 |
| Carbon Tetrachloride                    | 5.00    | 0.000         | 5.86                                 | 117   | 20-150 |
| Bromodichloromethane                    | 5.00    | 0.000         | 5.14                                 | 103   | 20-150 |
| cis-1,3-Dichloropropene                 | 5.00    | 0.000         | 4.68                                 | 94    | 20-150 |
| Trichloroethene                         | 5.00    | 5.84          | 9.63                                 | 76    | 20-150 |
| Dibromochloromethane                    | 5.00    | 0.000         | 5.01                                 | 100   | 20-150 |
| 1,1,2-Trichloroethane                   | 5.00    | 0.000         | 5.21                                 | 104   | 20-150 |
| Benzene                                 | 5.00    | 0.000         | 5.72                                 | 114   | 20-150 |
| trans-1,3-Dichloroprope                 | 5.00    | 0.000         | 4.44                                 | 89    | 20-150 |
| Bromoform                               | 5.00    | 0.000         | 5.01                                 | 100   | 20-150 |
| Tetrachloroethene                       | 5.00    | 0.000         | 5.45                                 | 109   | 20-150 |
| 1,1,2,2-Tetrachloroetha                 | 5.00    | 0.000         | 5.60                                 | 112   | 20-150 |
| Toluene                                 | 5.00    | 0.000         | 5.33                                 | 106   | 20-150 |
| Chlorobenzene                           | 5.00    | 0.000         | 5.41                                 | 108   | 20-150 |
| Ethylbenzene                            | 5.00    | 0.000         | 5.64                                 | 113   | 20-150 |
| Styrene                                 | 5.00    | 0.000         | 5.40                                 | 108   | 20-150 |
| 1,2-Dichloropropane                     | 5.00    | 0.000         | 5.17                                 | 103   | 20-150 |
| Chloromethane                           | 5.00    | 0.555         | 5.72                                 | 103   | 20-150 |
| Carbon disulfide                        | 5.00    | 0.000         | 6.09                                 | 122   | 20-150 |
| Acetone                                 | 25.00   | 0.000         | 23.84                                | 95    | 20-300 |
| 4-Methyl-2-pentanone                    | 25.00   | 0.000         | 25.47                                | 102   | 20-300 |
| 2-hexanone                              | 25.00   | 0.000         | 25.61                                | 102   | 20-300 |
|   |         |               |                                      |       |        |

#### 3A WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25403

Matrix Spike - Sample No.: MW-20S

| COMPOUND                | SPIKE  | SAMPLE        | MS            | MS    | QC.    |
|-------------------------|--------|---------------|---------------|-------|--------|
|                         | ADDED  | CONCENTRATION | CONCENTRATION | %     | LIMITS |
|                         | (ug/L) | (ug/L)        | (ug/L)        | REC # | REC.   |
| 2-butanone              | 25.00  | 0.000         | 24.19         | 97    | 20-300 |
| trans-1,2-Dichloroethen | 5.00   | 0.000         | 5.99          | 120   | 20-150 |
| cis-1,2-Dichloroethene  | 5.00   | 0.000         | 5.71          | 114   | 20-150 |
| Xylene (total)          | 15.00  | 0.000         | 18.21         | 121   | 20-150 |

# WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25403

Matrix Spike - Sample No.: MW-20S

|   | SPIKE   | MSD           | MSD   | ]     |       |        |
|---|---------|---------------|-------|-------|-------|--------|
| ·                                       | ADDED   | CONCENTRATION | %     | 8     | QC L  | IMITS  |
| COMPOUND                                | (ug/L)  | (ug/L)        | REC # | RPD#  | RPD   | REC.   |
| ======================================= | ======= | ==========    | ===== | ===== | ===== | ====== |
| Bromomethane                            | 5.00    | 5.45          | 109   | 8     | 25    | 20-150 |
| Vinyl Chloride                          | 5.00    | 5.29          | 106   | 4     | 25    | 20-150 |
| Chloroethane                            | 5.00    | 5.84          | 117   | 2     | 25    | 20-150 |
| Methylene Chloride                      | 5.00    | 6.89          | 100   | 15    | 25    | 20-300 |
| 1,1-Dichloroethene                      | 5.00    | 5.45          | 109   | 6     | 25    | 20-150 |
| 1,1-Dichloroethane                      | 5.00    | 5.36          | 107   | 7     | 25    | 20-150 |
| Chloroform                              | 5.00    | 5.41          | 108   | 6     | 25    | 20-150 |
| 1,2-Dichloroethane                      | 5.00    | 4.65          | 93    | 5     | 25    | 20-150 |
| 1,1,1-Trichloroethane                   | 5.00    | 6.74          | 77    | 23    | 25    | 20-150 |
| Carbon Tetrachloride                    | 5.00    | 5.29          | 106   | 10    | 25    | 20-150 |
| Bromodichloromethane                    | 5.00    | 4.90          | 98    | 5     | 25    | 20-150 |
| cis-1,3-Dichloropropene                 | 5.00    | 4.66          | 93    | 1     | 25    | 20-150 |
| Trichloroethene                         | 5.00    | 8.51          | 53    | 36*   | 25    | 20-150 |
| Dibromochloromethane                    | 5.00    | 5.01          | 100   | 0     | 25    | 20-150 |
| 1,1,2-Trichloroethane                   | 5.00    | 5.22          | 104   | 0     | 25    | 20-150 |
| Benzene                                 | 5.00    | 5.44          | 109   | 4     | 25    | 20-150 |
| trans-1,3-Dichloroprope                 | 5.00    | 4.98          | 100   | 12    | 25    | 20-150 |
| Bromoform                               | 5.00    | 4.76          | 95    | 5     | 25    | 20-150 |
| Tetrachloroethene                       | 5.00    | 5.09          | 102   | 7     | 25    | 20-150 |
| 1,1,2,2-Tetrachloroetha                 | 5.00    | 6.36          | 127   | 12    | 25    | 20-150 |
| Toluene                                 | 5.00    | 5.05          | 101   | 5     | 25    | 20-150 |
| Chlorobenzene                           | 5.00    | 5.21          | 104   | 4     | 25    | 20-150 |
| Ethylbenzene                            | 5.00    | 5.32          | 106   | 6     | 25    | 20-150 |
| Styrene                                 | 5.00    | 4.90          | 98    | . 10  | 25    | 20-150 |
| 1,2-Dichloropropane                     | 5.00    | 5.12          | 102   | 1     | 25    | 20-150 |
| Chloromethane                           | 5.00    | 5.57          | 100   | 3     | 25    | 20-150 |
| Carbon disulfide                        | 5.00    | 5.70          | 114   | 7     | 25    | 20-150 |
| Acetone                                 | 25.00   | 24.18         | 97    | 2     | 25    | 20-300 |
| 4-Methyl-2-pentanone                    | 25.00   | 24.62         | 98    | 4     | 25    | 20-300 |
| 2-hexanone                              | 25.00   | 27.73         | 111   | 8     | 25    | 20-300 |
|   | l.      |               |       |       |       |        |

### WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25403

Matrix Spike - Sample No.: MW-20S

| COMPOUND  | SPIKE<br>ADDED<br>(ug/L)       | MSD<br>CONCENTRATION<br>(ug/L) | MSD<br>%<br>REC #        | %<br>RPD #        | 1 ~                        | IMITS<br>  REC.                      |
|---|--------------------------------|--------------------------------|--------------------------|-------------------|----------------------------|--------------------------------------|
| 2-butanone<br>trans-1,2-Dichloroethen<br>cis-1,2-Dichloroethene<br>Xylene (total) | 25.00<br>5.00<br>5.00<br>15.00 | 26.08<br>5.32<br>5.49<br>16.82 | 104<br>106<br>110<br>112 | 7<br>12<br>4<br>8 | 25<br>25<br>25<br>25<br>25 | 20-300<br>20-150<br>20-150<br>20-150 |

- # Column to be used to flag recovery and RPD values with an asterisk
- \* Values outside of QC limits

RPD: 1 out of 34 outside limits

Spike Recovery: 0 out of 68 outside limits

| COMMENTS: |      |  |
|-----------|------|--|
|           | <br> |  |
|           |      |  |

VLCS06

WATER VOLATILE LAB CONTROL SAMPLE RECOVERY

Contract: 501112 Lab Name: COMPUCHEM

Lab Code: COMPU Case No.: 33902 SAS No.:

SDG No.: 25403

Lab Sample ID: 916198 LCS Lot No.: SE115

Lab File ID: CN016198B54.D Date Analyzed: 10/23/98

Dilution Factor: 1.0 Purge Volume: 25.0 (mL)

|                             | AMOUNT | AMOUNT    |      |        |
|-----------------------------|--------|-----------|------|--------|
|                             | ADDED  | RECOVERED | 0 "  | QC ·   |
| COMPOUND                    | (ug/L) | (ug/L )   |      | LIMITS |
| 1,1,1-Trichloroethane       | 5.00   | 4.94      | 99   | 20-150 |
| 1,1,2-Trichloroethane       | 5.00   | 4.32      |      | 20-150 |
| 1,2-Dichloroethane          | 5.00   | 4.42      |      | 20-150 |
| Benzene                     | 5.00   | 4.66      | F    | 20-150 |
| Bromodichloromethane        | 5.00   | 4.45      | i    | 20-150 |
| Bromoform                   | 5.00   | 4.31      |      | 20-150 |
| Bromomethane                | 5.00   | 5.02      | ſ    | 20-150 |
| Carbon Tetrachloride        | 5.00   | 4.71      | 94   | 20-150 |
| Carbon disulfide            | 5.00   | 4.88      | 98   | 20-150 |
| Chloroethane                | 5.00   | 5.00      |      | 20-150 |
| Dibromochloromethane        | 5.00   | 4.30      | 86   | 20-150 |
| Styrene                     | 5.00   | 4.36      |      | 20-150 |
| Tetrachloroethene           | 5.00   | 4.72      | . 94 | 20-150 |
| Trichloroethene             | 5.00   | 4.62      |      | 20-150 |
| cis-1,2-Dichloroethene      | 5.00   | 4.55      | 91   | 20-150 |
| cis-1,3-Dichloropropene     | 5.00   | 4.39      | 88   | 20-150 |
| trans-1,2-Dichloroethene    | 5.00   | 4.69      | 94   | 20-150 |
| trans-1,3-Dichloropropene   | 5.00   | 3.62      | 72   | 20-150 |
| Xylene (total)              | 15.00  | 14.37     | 96   | 20-150 |
| Methylene Chloride          | 5.00   | 5.17      | 104  | 20-300 |
| 2-butanone                  | 25.00  | 25.69     | 103  | 20-300 |
| 2-hexanone                  | 25.00  | 22.83     | 91   | 20-300 |
| 4-Methyl-2-pentanone        | 25.00  | 22.77     | 91   | 20-300 |
| Acetone                     | 25.00  | 24.16     | 97   | 20-300 |
| 1,1,2,2-Tetrachloroethane   | 5.00   | 4.29      | 86   | 20-150 |
| 1,1-Dichloroethane          | 5.00   | 4.71      | 94   | 20-150 |
| 1,1-Dichloroethene          | 5.00   | 4.72      | 94   | 20-150 |
| 1,2-Dichloropropane         | 5.00   | 4.48      | 90   | 20-150 |
| Chlorobenzene<br>Chloroform | 5.00   | 4.52      | 90   | 20-150 |
| CUTOTOTOLIII                | 5.00   | 4.56      | 91   | 20-150 |
|                             | l      |           | !    |        |

<sup>#</sup> Column to be used to flag LCS recovery with an asterisk.
\* Values outside of QC limits.

CLIENT SAMPLE NO.

WATER VOLATILE LAB CONTROL SAMPLE RECOVERY

VLCS06

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.:

SDG No.: 25403

Lab Sample ID: 916198

LCS Lot No.: SE115

Lab File ID: CN016198B54.D

Date Analyzed: 10/23/98

Purge Volume: 25.0 (mL)

Dilution Factor: 1.0

| COMPOUND  | AMOUNT<br>ADDED<br>(ug/L ) | AMOUNT<br>RECOVERED<br>(ug/L ) | %REC # | QC<br>LIMITS |
|---|----------------------------|--------------------------------|--------|--------------|
| Chloromethane Ethylbenzene Toluene Vinyl Chloride | 5.00                       | 4.69                           | 94     | 20-150       |
|   | 5.00                       | 4.61                           | 92     | 20-150       |
|   | 5.00                       | 4.62                           | 92     | 20-150       |
|   | 5.00                       | 4.57                           | 91     | 20-150       |

<sup>#</sup> Column to be used to flag LCS recovery with an asterisk.
\* Values outside of QC limits.

LCS Recovery: 0 outside limits out of 34 total.

| COMMENTS: |  |
|-----------|--|
|           |  |
|           |  |
|           |  |
|           |  |

VLCS34

Contract: 501112 Lab Name: COMPUCHEM

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25403

LCS Lot No.: SE115 Lab Sample ID: 916243

Lab File ID: CN016243A54.D Date Analyzed: 10/24/98

Dilution Factor: 1.0 Purge Volume: 25.0 (mL)

|   | AMOUNT   | AMOUNT                                  |        | 1      |
|---|----------|---|--------|--------|
|   | ADDED    | RECOVERED                               | i      | QC     |
| COMPOUND                                | (ug/L)   | (ug/L )                                 | %REC # | LIMITS |
| ======================================= | ======== | ======================================= | =====  | =====  |
| 1,1,1-Trichloroethane                   | 5.00     | 4.53                                    | 90     | 20-150 |
| 1,1,2-Trichloroethane                   | 5.00     | 4.89                                    | 98     | 20-150 |
| 1,2-Dichloroethane                      | 5.00     | 4.84                                    | 97     | 20-150 |
| Benzene                                 | 5.00     | 4.75                                    | 95     | 20-150 |
| Bromodichloromethane                    | 5.00     | 4.92                                    | l      | 20-150 |
| Bromoform                               | 5.00     | 4.72                                    |        | 20-150 |
| Bromomethane                            | 5.00     | 4.48                                    | 90     | 20-150 |
| Carbon Tetrachloride                    | 5.00     | 4.45                                    | 89     | 20-150 |
| Carbon disulfide                        | 5.00     | 4.47                                    | 89     | 20-150 |
| Chloroethane                            | 5.00     | 4.58                                    | 92     | 20-150 |
| Dibromochloromethane                    | 5.00     | 4.85                                    | 97     | 20-150 |
| Styrene                                 | 5.00     | 5.18                                    | 104    | 20-150 |
| Tetrachloroethene                       | 5.00     | 4.91                                    | 98     | 20-150 |
| Trichloroethene                         | 5.00     | 4.95                                    | 99     | 20-150 |
| cis-1,2-Dichloroethene                  | 5.00     | 4.41                                    | 88     | 20-150 |
| cis-1,3-Dichloropropene                 | 5.00     | 4.79                                    | 96     | 20-150 |
| trans-1,2-Dichloroethene                | 5.00     | 4.47                                    | 89     | 20-150 |
| trans-1,3-Dichloropropene               | 5.00     | 5.05                                    | 101    | 20-150 |
| Xylene (total)                          | 15.00    | 16.60                                   | 111    | 20-150 |
| Methylene Chloride                      | 5.00     | 4.39                                    | 88     | 20-300 |
| 2-butanone                              | 25.00    | 19.20                                   | 77     | 20-300 |
| 2-hexanone                              | 25.00    | 25.86                                   | 103    | 20-300 |
| 4-Methyl-2-pentanone                    | 25.00    | 25.02                                   | 100    | 20-300 |
| Acetone                                 | 25.00    | 18.69                                   | 75     | 20-300 |
| 1,1,2,2-Tetrachloroethane               | 5.00     | 5.19                                    | 104    | 20-150 |
| 1,1-Dichloroethane                      | 5.00     | 4.41                                    | 88     | 20-150 |
| 1,1-Dichloroethene                      | 5.00     | 4.38                                    | 88     | 20-150 |
| 1,2-Dichloropropane                     | 5.00     | 5.15                                    | 103    | 20-150 |
| Chlorobenzene                           | 5.00     | 4.94                                    | 99     | 20-150 |
| Chloroform                              | 5.00     | 4.84                                    | 97     | 20-150 |
| ·                                       |          |   |        |        |
|   |          |   |        |        |

<sup>#</sup> Column to be used to flag LCS recovery with an asterisk.
\* Values outside of QC limits.

CLIENT SAMPLE NO.

VLCS34

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.:

SDG No.: 25403

Lab Sample ID: 916243

LCS Lot No.: SE115

Lab File ID: CN016243A54.D

Date Analyzed: 10/24/98

Purge Volume: 25.0 (mL)

Dilution Factor: 1.0

| COMPOUND  | AMOUNT<br>ADDED<br>(ug/L ) | AMOUNT<br>RECOVERED<br>(ug/L ) | %REC # | QC<br>LIMITS |
|---|----------------------------|--------------------------------|--------|--------------|
| Chloromethane Ethylbenzene Toluene Vinyl Chloride | 5.00                       | 4.34                           | 87     | 20-150       |
|   | 5.00                       | 5.33                           | 106    | 20-150       |
|   | 5.00                       | 5.05                           | 101    | 20-150       |
|   | 5.00                       | 4.30                           | 86     | 20-150       |

<sup>#</sup> Column to be used to flag LCS recovery with an asterisk.
\* Values outside of QC limits.

LCS Recovery: 0 outside limits out of 34 total.

| COMMENTS: |      |      |      |      |      |  |
|-----------|------|------|------|------|------|--|
|           |      | <br> | <br> | <br> | <br> |  |
|           |      |      |      |      |      |  |
|           |      |      |      |      |      |  |
|           |      |      |      |      |      |  |
|           | <br> | <br> | <br> | <br> | <br> |  |

VLCS71

Contract: 501112 Lab Name: COMPUCHEM

Lab Code: COMPU Case No.: 33902 SAS No.:

SDG No.: 25403

Lab Sample ID: 915062

LCS Lot No.: SE115

Lab File ID: CN015062A56.D

Date Analyzed: 10/23/98

Purge Volume: 25.0 (mL)

Dilution Factor: 1.0

|   | AMOUNT  | AMOUNT    |        |        |
|---|---------|-----------|--------|--------|
|   | ADDED   | RECOVERED |        | QC     |
| COMPOUND                                | (ug/L)  | (ug/L )   | %REC # | LIMITS |
| ======================================= | ======= | 5======== | =====  | =====  |
| 1,1,1-Trichloroethane                   | 5.00    | 5.00      | 100    | 20-150 |
| 1,1,2-Trichloroethane                   | 5.00    | 4.15      |        | 20-150 |
| 1,2-Dichloroethane                      | 5.00    | 4.59      |        | 20-150 |
| Benzene                                 | 5.0.0   | 4.70      |        | 20-150 |
| Bromodichloromethane                    | 5.00    | 4.79      |        | 20-150 |
| Bromoform                               | 5.00    | 4.44      | 89     | 20-150 |
| Bromomethane                            | 5.00    | 5.45      | 109    | 20-150 |
| Carbon Tetrachloride                    | 5.00    | 5.12      | 102    | 20-150 |
| Carbon disulfide                        | 5.00    | 4.71      | 94     | 20-150 |
| Chloroethane                            | 5.00    | 5.06      | 101    | 20-150 |
| Dibromochloromethane                    | 5.00    | 4.45      | 89     | 20-150 |
| Styrene                                 | 5.00    | 4.69      | 94     | 20-150 |
| Tetrachloroethene                       | 5.00    | 5.17      | 103    | 20-150 |
| Trichloroethene                         | 5.00    | 4.87      | 97     | 20-150 |
| cis-1,2-Dichloroethene                  | 5.00    | 4.96      | 99     | 20-150 |
| cis-1,3-Dichloropropene                 | 5.00    | 4.22      | 84     | 20-150 |
| trans-1,2-Dichloroethene                | 5.00    | 4.64      | 93     | 20-150 |
| trans-1,3-Dichloropropene               | 5.00    | 4.36      | 87     | 20-150 |
| Xylene (total)                          | 15.00   | 16.52     | 110    | 20-150 |
| Methylene Chloride                      | 5.00    | 4.20      | 84     | 20-300 |
| 2-butanone                              | 25.00   | 23.08     | 92     | 20-300 |
| 2-hexanone                              | 25.00   | 18.72     | 75     | 20-300 |
| 4-Methyl-2-pentanone                    | 25.00   | 19.78     | 79     | 20-300 |
| Acetone                                 | 25.00   | 18.13     |        | 20-300 |
| 1,1,2,2-Tetrachloroethane               | 5.00    | 4.23      |        | 20-150 |
| 1,1-Dichloroethane                      | 5.00    | 4.69      |        | 20-150 |
| 1,1-Dichloroethene                      | 5.00    | 4.83      |        | 20-150 |
| 1,2-Dichloropropane                     | 5.00    | 4.62      |        | 20-150 |
| Chlorobenzene                           | 5.00    | 4.77      |        | 20-150 |
| Chloroform                              | 5.00    | 4.84      | 97     | 20-150 |
|   |         |           |        |        |

<sup>#</sup> Column to be used to flag LCS recovery with an asterisk.
\* Values outside of QC limits.

VLCS71

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.:

SDG No.: 25403

Lab Sample ID: 915062

LCS Lot No.: SE115

Lab File ID: CN015062A56.D

Date Analyzed: 10/23/98

Purge Volume: 25.0 (mL)

Dilution Factor: 1.0

| COMPOUND  | AMOUNT<br>ADDED<br>(ug/L ) | AMOUNT<br>RECOVERED<br>(ug/L ) | %REC # | QC<br>LIMITS |
|---|----------------------------|--------------------------------|--------|--------------|
| Chloromethane Ethylbenzene Toluene Vinyl Chloride | 5.00                       | 5.03                           | 101    | 20-150       |
|   | 5.00                       | 4.77                           | 95     | 20-150       |
|   | 5.00                       | 4.28                           | 86     | 20-150       |
|   | 5.00                       | 5.11                           | 102    | 20-150       |

<sup>#</sup> Column to be used to flag LCS recovery with an asterisk.
\* Values outside of QC limits.

LCS Recovery: 0 outside limits out of 34 total.

| COMMENTS: | <br> | <br> |
|-----------|------|------|
|           | <br> |      |



a division of Liberty Analytical Corp.

ENTERED IN DATA AND 199/78
BY/DATE DVS AND 199/78
CHECKED BY DVS / DIS
DATE ///3/98

OCT 28 1003

27/OCT/98

LEGGETTE BRASHEARS & GRAHAM ATTN: MR. KEN VOGEL | 1210 WEST COUNTY Rd. E, STE700 ST. PAUL, MN 55112

Subject: Report of Data - Account Number# 501112 Order# 33902

ATTN: MR. KEN VOGEL

Enclosed are the results of analytical work performed in accordance with the referenced account number.

This report covers 20 sample(s) appearing on the attached listing.

Thank you for selecting CompuChem Environmental for your sample analysis. If you should have questions or require additional analytical services please contact your representative at 1-800-833-5097.

Sincerely,

CompuChem Environmental

a division of Liberty Analytical

Attachment

a division of Liberty Analytical Corp.

#### 27/OCT/98

914758

LEGGETTE BRASHEARS & GRAHAM

ATTN: MR. KEN VOGEL

1210 WEST COUNTY Rd. E, STE700

ST. PAUL, MN 55112

#### ACCOUNT #: 501112

| β.,    |           |              |
|--------|-----------|--------------|
| CC#    | SAMPLE-ID | RECEIPT DATE |
|        |           |              |
| 914726 | E101498-1 | 10/17/98     |
| 914729 | MWC-1     | 10/17/98     |
| 914730 | MWB-1     | 10/17/98     |
| 914731 | PZ-22I    | 10/17/98     |
| 914732 | MWB-4     | 10/17/98     |
| 914733 | PZ-21I    | 10/17/98     |
| 914734 | MW-19S    | 10/17/98     |
| 914735 | PZ-19I    | 10/17/98     |
| 914736 | PZ-20D    | 10/17/98     |
| 914737 | MW-18S    | 10/17/98     |
| 914738 | MWB-2     | 10/17/98     |
| 914739 | MWC-2     | 10/17/98     |
| 914740 | MW-7S     | 10/17/98     |
| 914741 | PZ-7I     | 10/17/98     |
| 914742 | MWB-5     | 10/17/98     |
| 914743 | MWA-5     | 10/17/98     |
| 914744 | MWA-6     | 10/17/98     |
| 914745 | PZ-13I    | 10/17/98     |
| 914746 | MWA-6DUP  | 10/17/98     |
|        |           | • •          |

TOTAL NUMBER OF SAMPLES = 20

MWA-3

10/17/98

CompuChem a Division of Liberty Analytical 501 N. Madison Avenue Cary, NC 27513

> SDG NARRATIVE CASE:33902 SDG:25401 CONTRACT:501112

SAMPLE IDENTIFICATIONS: PZ-22I PZ-21I PZ-19I PZ-20D PZ-7I PZ-13I MWC-1 MWB-1 MWB-4 MW-19S MW-18S MWB-2 MWC-2 MW-7S MWB-5 MWA-5 MWA-6 MWA-6DUP MWA-3 E101498-1

The twenty(20) water samples listed above were received intact, properly refrigerated, with proper chain of custody(COC) documentation on October 17,1998. The samples were prepared and analyzed following SW846 method 8260 25ml purge. All of these samples were submitted for volatile only analysis.

#### **VOLATILES:**

Analysis holding time requirements were met for these samples. The majority of samples contained one or more of the target analytes 1,1,1-trichloroethane, trichloroethene, tetrachloroethene, acetone, 1,1-dichlorethene, 1,1-dichloroethane and cis-1,2-dichloroethene. Nine out of the twenty submitted samples were diluted due to one or more of these target analytes.

Sample MWA-6 was originally analyzed at a 25:1 dilution based on screen data, however trichloroethene exceeded the calibration range. The sample was further diluted 100:1 to bring this analyte into calibration range. Sample MWB-1 was initially analyzed neat and acetone exceeded the calibration range. A reanalysis at a 1.9:1 dilution brought this analyte into range. We are reporting both analyses for both of these samples so that no TCL data would be lost due to dilution.

No Tentatively Identified Compound (TIC) data is provided as requested by the client.

All of the surrogates met recovery criteria and all of the internal standards met response and retention time criteria in the analyses of these samples.

The associated method blanks met all quality control criteria and all contained methylene chloride below the reporting limit.

The associated Laboratory Control Samples (LCS's) met all QC acceptance limits.

The duplicate matrix spikes generated from MWA-3 met all QC precision and accuracy criteria with one exception. The spike compound 1,1,1-trichloroethane exceeded the advisory RPD limit.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions listed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Roy M. Sutton

Development Chemist October 27, 1998

Ro Julla

### GC and GC/MS Column and Trap Specifications Table

# **COLUMNS**

| Brand Name | Coating  | ID   | Film Thickness | Length |
|------------|----------|------|----------------|--------|
|            | Material | (mm) | (um)           | (m)    |
|            |          |      |                |        |

| GC Laborate | ory                 |      |      |    |
|-------------|---------------------|------|------|----|
| Restek      | RTX-1701            | 0.53 | 0.5  | 30 |
| J&W         | DB-608              | 0.53 | 0.83 | 30 |
| Restek      | <b>CLPesticides</b> | 0.53 | 0.5  | 30 |
| Restek      | CLPesticides II     | 0.53 | 0.42 | 30 |

| GC/MS Volat | iles Laboratory | _    |     |       |
|-------------|-----------------|------|-----|-------|
| J & W       | DB-624          | 0.53 | 3.0 | 30/75 |
| Supelco     | SPB-624         | 0.53 | 3.0 | 75    |

| GC/MS Semivola  | tiles Laborato | ry   |      |    |
|-----------------|----------------|------|------|----|
| J & W           | DB-5           | 0.32 | 1.0  | 30 |
| Hewlett Packard | HP5-MS         | 0.25 | 0.25 | 30 |

### **TRAP**

| GC/MS Volatile | s Laboratory  |
|----------------|---|
|                | * 15 cm of 2,6-diphenylene oxide polymer (Tenax) * 1 cm of methyl silicone packing (OV-1 coating) |
|                | * 8 cm of silica gel  |
|                | * 0.5 cm of glass wool at each end  |

### Notification Regarding Manual Editing/Integration Flags

In some instances, manual adjustments to the software output are necessary to provide accurate data. These adjustments are performed by the data reviewer, GC/MS operator, or GC chemist. An Extracted Ion Current Profile (EICP) or a GC chromatographic peak has been provided for the manual integration of each compound to demonstrate the accuracy of that process. Adjustments are flagged on the quantitation report in the far right column beyond the FINAL concentration for GC/MS analysis, and in the "Flags" column for GC analysis. The manual editing/integration flags are:

- M Denotes that a manual integration has been performed for this compound. The manual integration was performed in order to provide the most accurate area count as possible for the peak.
- Denotes that the data reviewer, GC/MS operator, or GC Chemist has chosen an alternate peak within the retention time window from that chosen by the software for that compound. No manual integration is performed in choosing an alternate peak. The software still performs the integration.
- MH Denotes that an alternate peak has been chosen within the retention time window from that chosen by the software for that compound and also a manual integration of the chosen peak has been performed. The manual integration was performed in order to provide the most accurate area count possible for the peak.
- L Denotes that the data reviewer or GC/MS operator has selected an alternate library search. This is typically done when an additional tentatively identified compound (TIC) has been added to the number of peaks searched. No manual integration is performed in choosing an alternate peak. The software still performs the integration.
- Denotes that an alternate library search has been selected and a manual integration has also been performed. This is typically done when an additional TIC has been added and the TIC peak also required a manual integration.

With the introduction of the current EPA CLP SOW (Document Number OLM03.0, plus revisions) additional explanations for manual editing/integration are required. In the accompanying raw data packages, additional codes have been applied to the "M" flag and carry the following meanings;

- M1 The compound was not found by the automatic integration routine.
- M2 The compound was incorrectly integrated by the automatic integration routine.
- M3 The co-eluting compounds were incorrectly integrated by the automatic integration routine.

These codes will appear in the GC/MS and GC data packages.

Robert E. Meierer

Vice President

### DATA REPORTING QUALIFIERS

On the Form I, under the column labeled "Q" for qualifier, each result is flagged with the specific data reporting qualifiers listed below, as appropriate. Up to five qualifiers may be reported on Form I for each compound. The qualifiers used are:

- This flag indicates the compound was analyzed for but not detected. The Contract Required Quantitation Limit (CRQL) (or Reporting Limit) will be adjusted to reflect any dilution and, for soils, the percent moisture.
  - J: This flag indicates an estimated value. The flag is used as detailed below:
    - 1. When estimating a concentration for tentatively identified compounds (TICs) where a response factor of 1.0 is assumed for the TIC analyte,
    - 2. When the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the CRQL (or Reporting Limit) but greater than zero, and
    - 3. When the retention time data indicates the presence of a compound that meets the pesticide/Aroclor or other GC or HPLC identification criteria, and the result is less than the CRQL (or Reporting Limit) but greater than zero. For example, if the CRQL (or Reporting Limit) is 10 µg/L, but a concentration of 3 µg/L is calculated, it is reported as 3J.
- N: This flag indicates presumptive evidence of a compound. This flag is only used for TICs, where the identification is based on a mass spectral library search. For generic characterization of a TIC such as 'chlorinated hydrocarbon', the N flag is not used.
- P: In the EPA's Contract Laboratory Program (CLP), this flag is used for a pesticide/Aroclor target analyte, when there is greater than 25% difference for detected concentrations between the two GC columns. The <u>lower</u> of the two values is reported on Form I and flagged with a P. For SW-846 GC and HPLC analyses, when the Relative Percent Difference (RPD) is greater than 40% and there is no evidence of chromatographic anomalies or interferences, then the <u>higher</u> of the two values is reported and flagged with a P. When the RPD is equal to or less than 40%, our policy is to also report the <u>higher</u> of the two values, although the choice could be a project specific issue.
- C: This flag applies to GC or HPLC results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, this flag is not applied; a laboratory-defined flag is used instead (see the X/Y/Z qualifier.)

### DATA REPORTING QUALIFIERS (continued)

- B: This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates probable blank contamination and warns the data user to take appropriate action. This flag is used for a TIC as well as for a positively identified target compound. The combination of flags BU or UB is not an allowable policy. Blank contaminants are flagged B only when they are detected in the sample.
- E: This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis. If one or more compounds have a response greater than the upper level of the calibration range, the sample or extract will be diluted and reanalyzed. All such compounds with a response greater than the upper level of the calibration range will have the concentration flagged with an E on Form I for the original analysis.
- D: If a sample or extract is reanalyzed at a higher dilution factor, for example when the concentration of an analyte exceeds the upper calibration range, the DL suffix is appended to the sample number on Form I for the more diluted sample, and all reported concentrations on that Form I are flagged with the D flag. This flag alerts data users that any discrepancies between the reported concentrations may be due to dilution of the sample or extract.
- NOTE 1: The D flag is not applied to compounds which are not detected in the sample analysis i.e. compounds reported with the CRQL (or Reporting Limit) and the U flag.
- NOTE 2: Separate Form Is are used for reporting the original analysis (Client Sample No. XXXXX) and the more diluted sample analysis (Client Sample No. XXXXXDL) i.e. the results from both analyses are not combined on a single Form I.
- A: This flag indicates that a TIC is a suspected aldol-condensation product.
- S: This flag indicates that an analyte was detected by a single column GC analysis but the result was below the Reporting Limit. This flag is only used when clients request a second (confirmation) column analysis after detecting an analyte above the Reporting Limit in the initial, single column analysis. This flag alerts the data user that only an analyte was detected below the Reporting Limit and a second (confirmation) analysis was not performed.
- X/Y/Z: Other specific flags may be required to properly define the results. If used, the flags will be fully described in the SDG Narrative. The laboratory-defined flags are limited to X, Y and Z.

| mpuChem 1 Madison Avenue ry, NC 27513 | ATIO                            |               | 1th G                        | امدا                     |              |          |              |                 |  |                  |          |          | -            |       |     |                                  |
|---------------------------------------|---------------------------------|---------------|------------------------------|--------------------------|--------------|----------|--------------|-----------------|--|------------------|----------|----------|--------------|-------|-----|----------------------------------|
| 1 Madison Avenue<br>ry, NC 27513      |                                 |               | _                            | (VKV)                    | er G         | WSA      | melina       |                 |  |                  |          |          |              |       |     |                                  |
| ry, NC 27513                          |                                 | Project       | Name:                        | $\overline{\mathcal{D}}$ | AYT          | ON       | THEIST       | hal pro         | DT                                     | Consultant:      | 1        | egi e    | Ha           | B     | ral | Thearis Grahim Foo               |
| · ·                                   | 1                               | Site Lo       | watton.                      | V.                       | 'Y 1 V L     | · · ·    | H            |                 |  | Address:         |          | BI L     |              | 10    | K.  | il. E                            |
|                                       |                                 | Site          | Code:                        | 50                       | 00           | 1        |              |                 | _                                      | -                | 57       | Paul     |              | 411.  |     | 5112                             |
| one Number: 1-800-833-5097            | 1                               | RFA N         | umber:                       | 490                      | P980         | 2025     | 4-7          |                 |  | onsultant PM:    | Ken      |          | _            |       |     |                                  |
| x Number: (919) 379-4050              |                                 | Chrys         | ler PM:                      | Gar                      | 4 54         | 14CZ.    | 1K           |                 |  | Phone:           | 651-     | 4902     | 14.          | 75    |     | Fax: 651-490-1066                |
|                                       | )ste Packag                     | e Deliverab   | les: (cln                    | cle)                     |              | C        | mpound 1     | let-Parameter/N | ethod/Bo                               | ttle Type/Pro    | servativ | ė        |              |       |     | Matrix Codes                     |
| calendar hrs.                         | Chrysler Leve                   |               |                              |                          | 1            | 1        | Ì            | 1               |  |                  | · 1      |          | S - Sc       |       |     | SW - Surface Water               |
|                                       | Chrysler Leve<br>Other (specify |               |                              |                          | 1            | }        |              | 1               | İ                                      |                  |          |          | GW -         |       |     | ter A - Air                      |
| days O                                | Julea (specify                  | у).           |                              |                          | 1            | - 1      | 1            | l l             | Ì                                      |                  |          |          | Sed.         |       |     | ,<br>a.s.                        |
| days                                  |                                 | <del></del>   | <del></del>                  |                          | $\dashv$     | i        | 1            |                 | }                                      |                  |          |          | 0-0          | Use C |     | (y)                              |
|                                       |                                 |               |                              |                          | ž.           |          |              |                 |  |                  |          |          |              |       |     |                                  |
| Ì                                     | 1                               |               | 2                            |                          | # of Contain | 0        |              |                 |  |                  |          | İ        | 4 .          | 7 7   | ı   |                                  |
| ]                                     | Ì                               | ]             | Grab (G) or<br>Composite (C) | 发                        | 3            | 60       | 1            |                 | 1                                      | Ì                | ] ]      | 1        | 1            | ¥ #   | Ì   |                                  |
| Í                                     | 1                               |               | (S. 1)                       | Matrix Code              | 8            | 82       |              | 1 1             | Ì                                      |                  |          |          | Volatiles pH | H 4   | ' . |                                  |
|                                       | Date                            | Time .        | 4 E                          |                          | Total        | 30       | }            | 1               | - 1                                    |                  |          | 1        |              | Metab |     |                                  |
| Field Sample Identification           | Collected                       | Collected     | <u> </u>                     | Σ                        |              |          |              |                 |  |                  |          | <u> </u> | \$           |       | 9   | Remarks                          |
|                                       | 10/14/96                        |               | 6                            | 5W                       | 3            | X        |              |                 |  |                  |          |          |              |       |     | Equipment Blank                  |
| MWC-1                                 |                                 | 8:40          | 1                            |                          | 3            | _×       |              |                 |  |                  |          |          |              |       |     |                                  |
| MWB-1                                 |                                 | 8:50          |                              |                          | 3            | _X       |              |                 |  |                  |          |          |              |       |     |                                  |
| PZ-22I                                |                                 | 9:05          |                              |                          | 3            | X        |              |                 |  |                  |          |          |              |       |     |                                  |
| MWB54                                 |                                 | 9:40          |                              |                          | 3            | X        |              |                 |  |                  |          |          |              |       |     |                                  |
| PZ -21 I                              |                                 | 9:50          |                              |                          | 3            | X        |              |                 |  |                  |          |          |              | 1     |     |                                  |
| MW-195                                |                                 | 10:10         |                              |                          | 3            | X        |              |                 |  |                  |          | <u> </u> |              |       |     |                                  |
| FZ-19I                                |                                 | 10:20         | $\prod$                      |                          | 3            | X        |              |                 |  |                  |          | †        |              |       |     |                                  |
| PZ-200                                |                                 | 10:50         |                              |                          | 3            | X        |              |                 |  |                  | 1        | 1        |              |       |     |                                  |
| MW-185                                | V                               | 11:04         | V                            | W                        | 3            | X        |              |                 |  |                  | 1        | 1        |              |       |     |                                  |
| ampler(s) 7                           | Bottles Reliqu                  | ished under A | irbill No.                   | 428                      | 7 49         | 5774     | 198          | Samples Re      | inquished n                            | ınder Airbili No | 20       | 24       | 153          | 4     | 73  | Temperature (corrected) 4.4 10/1 |
| Prinial Prisall                       | Refinquished                    | bys ()        |                              | ,                        | Date:        |          | Time:        | Received by     | ــــــــــــــــــــــــــــــــــــــ |                  | 1        | Date:    |              | Time: |     | Custody Seel Intact?             |
|                                       | Some                            | MC Y-         | VIII                         | 1/                       | 10/1         | 5/48     |              | 1/              | Lu                                     | - Soo!           | <b>/</b> | 10-1     | 6.50         | 12    | /٦  | Yes No                           |
|                                       | Relinquished                    |               |                              | · · · ·                  | Date:        | 44       | Time:        | Received by     |  | 7000             | <u></u>  | Dates    |              | Time  |     | Custody Seal Intact?             |
| Cooler ID # 402                       |                                 |               |                              |                          |              |          |              |                 | •                                      |                  |          |          |              |       |     | Yen No                           |
| s RFA sampling complete?              | Relinquished                    | by:           |                              |                          | Date:        |          | Tlane:       | Received #      | Liberates                              | M soc            |          | Dute:    | /            | Time: |     | Controly Seel Intact?            |
| Yes No                                | <u> </u>                        |               |                              |                          |              |          |              | XK              | Me                                     | ZUM              | see      | 10/1     | 7/98°        | 10.   | 49  | KY (You) No                      |
|                                       |                                 |               |                              |                          |              |          |              | CIMS 482-00-51, |  | Tills, Michigo   | an 48326 | -2757    |              |       |     |                                  |
|                                       | Distribution                    | n: White cop  | y: Data i                    | nackage                  | Yelle        | ow : Ret | ained by lai | boratory Pink:  | etained by                             | y sampler        |          |          |              |       |     |                                  |

Stragg ID 4 DE 11:30or Samples intact

| CHRYSL                                  | ER                  |                |  |              |                      |  |                |              |              | Cha   | in-of          | -Cu                                    | stod   | y         |  |  | 03733 A                                      |
|---|---------------------|----------------|--|--------------|----------------------|--|----------------|--------------|--------------|---|----------------|--|--|-----------|--|--|--|
| WY CORPOR                               | DITAS               |                | 4150   | كالعديدا     | ler (                | 5w &   | mo lina        | situals      |              |   |                |  |  | <u> </u>  |  |  |  |
| mpuChem                                 |                     | Project        | Name:  | Deig         | tu:                  | Thei   | 201 9          | situati      |              | Cor   | sultant:       | 124                                    | , Ho   | Re        | ec.L   | Acre i                                       | & Araban Inc.                                |
| Madison Avenue                          | İ                   | Site Lo        | ocation:   | 120          | yton                 | 1. OF  | 1.             |              |              | Consultant: Lage He Bricherick Graham, Inc.  Address: 1270 W. CO. Rel E |                |  |  |           |  |  |  |
| y, NC 27513                             |                     | Site           |  | sc           |                      |  |                |              |              |   | -              | 51.1                                   | QuI.   | M         | N N  | 1  | //2_   |
| ne Number: 1-800-833-5097               |                     | RFA N          |  |              |                      |  | 54-T           |              |              | Consul  | -<br>ltant PM: | Ker                                    |  |           |  |  |  |
| Number: (919) 379-4050                  |                     | Chrys          | ler PM:  | Ga           | <b>7</b> 4           | Stance   | u <u>K</u>     |              |              |   |                | <u> 51-4</u>                           | 90- 7  | 140       | <u> </u>   |  | Fax: 651-490-1006                            |
| rn-around Time Request:                 | Data Packs          | ge Deliverab   | les: (circ                                       | cke)         | 0                    |  |                | ist-Paramete | d/Bottle     | servative   |                |  |  |           | Matrix Codes                                     |  |  |
| calendar hrs.                           | Chrysler Lev        |                |  |              | - [                  |  |                |              |              |   |                | T                                      |  | S-S       | oil  |  | SW - Surface Water                           |
| calendar hrs.                           | Chrysler Lev        |                |  |              | - 1                  |  |                | - 1          | 1            |   |                |  |  | GW -      | - Org  | ew bauc                                      | ter A-Air                                    |
| days                                    | Other (specif       | fy):           |  |              | - 1                  |  |                | - 1          | Į.           |   |                | Į                                      |  | Sed.      | - Sa   | diment                                       |  |
| days                                    | <del></del>         |                |  |              |                      |  |                |              |              |   |                |  |  |           |  | (speci                                       | fy)  |
|   | <del>   </del>      |                | т  |              |                      |  | 1              | 1            |              |   |                |  |  | Lab       | Use  | Only   |  |
|   | Data                | Time           | Grab (G) or<br>Composite (C)                     | Matrix Code  | Total # of Containen | 8260   |                |              |              |   |                |  |  | =         | ۷. <u>ا</u>                                      | Cyanide pH > 12<br>Other                     |  |
| Field Sample Identification             | Collected           | Collected      | 20   | Σ            |                      |  |                |              | <u> </u>     | <u> </u>  |                |  |  | 3         | ž,   | <u> 5                                   </u> | Remarks                                      |
| MWayB-2                                 | 10/14/98            |                | 6  | <del>w</del> | 3                    | X  |                |              | <u> </u>     | <u> </u>  |                |  |  |           |  |  |  |
| MWC-2                                   |                     | 11:45          | ]  | $  \   \  $  | 3                    | $  \times  $                                     |                |              |              |   |                |  |  |           |  |  |  |
| MW-75                                   |                     | 13:00          |  |              | 3                    | X  |                |              | 1            |   |                |  |  |           |  |  |  |
| f Z- 7I                                 | 1-1-                | 13:10          |  |              | 3                    | 1  | <u> </u>       |              | 1            | 1   | <del> </del>   | <del> </del> -                         | <u> </u>   |           |  | -+   |  |
| MW8-5                                   | <del>    -  </del>  | 13:20          | -  | ++           | 7                    | <del>                                     </del> |                |              | ╁┈──         | ╁╌╌╴  | <b></b>        | <del></del> -                          | <del>                                     </del> | +         |  |  | <del> </del>                                 |
|   | <del>- - </del>     |                | <del>                                     </del> | - -          | 3                    | 1  |                |              | ┼            | <del> </del>  | <del> </del>   | <u> </u>                               | <u> </u>   | $\vdash$  |  |  |  |
| MWA-5                                   |                     | 13:30          | <b>II</b>  |              | 15                   | X,   | <b> </b>  _    |              | ļ            | ļ   | ļ              | <u> </u>                               | <u> </u>   |           |  |  | <u> </u>                                     |
| PIWA-6                                  |                     | 13:55          | Ш  | Ш            | 3                    | LX_  | <u> </u>       |              |              | <u> </u>  | <u> </u>       |  |  |           |  |  | <u>                                     </u> |
| FZ-13I                                  |                     | 13:40          | ] [  | 11           | 3                    |  |                |              |              |   |                |  |  |           |  |  |  |
| MW A-6 D60                              |                     | 13:56          |  |              | 3                    | X  | 11-            |              | 1            | $\uparrow$  |                | 1                                      | <u> </u>   |           |  |  |  |
| Trip Bkin K 10 1498 suppler(s). Versall | 1                   |                | V  | 1            | 2                    | X  | <del>  -</del> |              | 1            | +   | 1              | <del> </del>                           | <del>                                     </del> | +         | <del>                                     </del> |  |  |
| mpler(s).                               |                     | uished under A | irbill No.                                       |              |                      | 4957   | 7498           | Sample       | - Pelinani   | bed under   | Alrhill No     | 203                                    | 44   | 4         | 4-   | 7.2  | Tomperature (corrected) 4.0 C (0.400         |
| Dunil Burell                            | Religionished       | l hor          |  |              | Desta                |  | Times          | Receive      |              |   |                | 1                                      | Date:  |           | TI   |  | Custody Seal Intact?                         |
| Triva VI VI Survey                      | Kon                 | W (x           | rusa   | ell .        | 101                  | 15198  | 1              |              | "            | / /   | Junt 1         | $\mathscr{H}$                          | 10-16  | <b>48</b> | 1  |  | Yes No.                                      |
|   | Relinquished        |                |  | ·            | Dete                 |  | Thate:         | Receive      |              |   |                | <del></del>                            | Dates  |           | Tie  |  | Curlody Seal Satect?                         |
| noler ID # 402                          |                     |                |  |              |                      |  |                |              | . <b>.</b> . |   |                |  |  |           |  |  | Yes No                                       |
| RFA sampling complete?                  | Relinquished        | i by:          |  |              | Date                 | <br>!  | Time:          | Racks        | d for Lab    | oretery by:   |                | ······································ | Date: ,  |           | Ti.  | ***  | Castedy Seal Intact?                         |
| Yes No                                  |                     | •              |  |              |                      |  | ]              |              | 1111         | SIII  | uns            | 7                                      | Idi  | 7/40      | 1  | ): 40a                                       |  |
|   |                     | Ch             | rysler Co  | orporat      | tion 8               | 00 Chrys   | ler Drive.     | IMS 482-00   | -51, Aub     | urn Hills.  |                |  | -2757  | 411       | .1/ 5  |  |  |
| < a                                     | Distributio<br>mple | n: White cop   | -  |              |                      |  | =              | -            | k: Retair    | San   | npler 5        | ra/en                                  |  |           | _  |  |  |
| $\rightarrow a$                         | mece                |                | - حلب عما<br>د                                   | ~ ·          |                      | -0   |                |              | _            | رسەر  | price          | s cr                                   | 1/00   | / I       |  |  |  |

1D 4 DE10/11/98 11:30am Cooker lengt 10

| CHRYSLI<br>CORPOR           | ER                |                   |                              |             |                  |           |           |            |          |           | Cha  | ın-oı      | -Cu               | stod     | ly            |        |            | 1          | U3 (34 A)                        |
|-----------------------------|-------------------|-------------------|------------------------------|-------------|------------------|-----------|-----------|------------|----------|-----------|--|------------|-------------------|----------|---------------|--------|------------|------------|----------------------------------|
| AV CORPOR                   | ATI               | DN                | 4                            | 14          | Qtr              | رس        | Sam       | pling      |          |           |  |            |                   |          |               |        |            |            |                                  |
| Chem                        |                   | Project           | t Name:                      | Dr.y        | bu.              | Their     | sil P     | rolluc     | fi       |           | Соп  | sultant:   | Leigne            | He.      | Box           | 416    | la         | 15         | Conhan, Inc 10                   |
| idison Avenue               |                   | Site L            | ocation:                     | Pax         | ton              | OF        | Ĺ         |            |          |           | Address: 12/0 W. Co. Ref. E                      |            |                   |          |               |        |            | <b>,</b>   |                                  |
| C 27513                     |                   | 1                 | e Code:                      |             | Sco              |           |           |            |          |           | St Paul, MN SS/12                                |            |                   |          |               |        |            |            |                                  |
| Number: 1-800-833-5097      |                   |                   | Number:                      | }           | _                | 198       |           |            | <u> </u> |           | Consul   | tant PM:   |                   | Voca     |               |        |            |            |                                  |
| imber: (919) 379-4050       | Data Pack         | age Deliveral     | sler PM:                     |             | 400 p            |           | 220       |            |          | 26.41     | h (27) - 43 - 2                                  |            | 651-4             |          | 405           |        |            | F          | ax: 651 - 440 - 1405             |
| andar hrs.                  | Chrysler L        |                   | oica: (cu                    | ciej        | ŀ                |           | ompour    | MI LIST-!  | aramete  | Metho     | d/Bottle   | Type/Pre   | servativ          | 0        | S - Se        | oil    |            |            | Matrix Codes SW - Surface Water  |
|                             | Chrysler L        |                   |                              |             |                  |           |           |            |          |           | i i  |            |                   |          | GW .          |        | ound       | wate       | 1                                |
| endar hrs.                  | Other (spe        | cify):            |                              |             | ĺ                |           |           |            | l.       |           | 1 1  |            |                   |          | Sed.          |        |            |            |                                  |
| <u>s</u>                    | <u> </u>          | <del></del>       |                              |             |                  | - 1       |           |            |          |           |  |            |                   |          | 0-0           |        |            | _          | <u> </u>                         |
|                             | ι                 | · · · · · · · · · |                              | <del></del> |                  | 1         |           |            |          |           |  |            |                   |          | Lab           | Use    | · On       | <b>9</b>   | ·                                |
|                             |                   |                   | ļ                            |             |                  |           |           |            |          |           | { :  |            |                   |          |               |        | 22         | 1          |                                  |
|                             | ļ                 |                   | ତ                            | 1.          | orrta            | 0         |           | }          |          |           |  |            |                   |          | 3             | 7      | ٨          | - II       |                                  |
|                             | Į.                |                   | ite o                        | ğ           | ည                | 26        |           |            |          | ļ         |  |            |                   | ļ        | Hd            | pH < 2 | 푅          | Ш          |                                  |
|                             |                   |                   | 0 8                          | Mstrix Code | Total # of Conta | 82        |           |            |          |           |  |            |                   | ļ        |               | 4      | 쳝          | <u>.</u> . |                                  |
| Field Sample Identification | Date<br>Collected | Time<br>Collected | Grab (G) or<br>Composite (C) | ĭ8<br>Z     | Tot              |           |           | 1          | Ì        | 1         |  |            |                   |          | Volatiles     | Metab  | Cyambide   | 죍          | Remarks                          |
| 7-12]                       | 10/14/9           | 6 14:00           |                              | 1W          | 3                | X         |           |            |          |           |  |            |                   |          |               |        |            |            |                                  |
| 72-120                      |                   | 14:10             | Ī                            | 1           | 3                | X         |           |            |          |           | <del>                                     </del> |            |                   | <b>†</b> | 11            |        |            | $\neg$     |                                  |
| IW-155                      |                   | 14:50             |                              |             | 2                | X.        |           | 1          | 1        | <u> </u>  | <u> </u>   |            |                   |          | 11            |        |            |            |                                  |
| 10 1498-2                   |                   | 15:00             |                              | 77          | 2                | X         |           |            |          |           |  |            |                   | <u> </u> |               |        |            |            | Eaujament Blank On bottle PZ-15I |
| 1W-15I A                    |                   | 15:01             |                              |             | 2                | X         |           | sho        | JIA i    | and       | A2-1   | Ly         | 10 19             | That     | 4ton          | n d    | ارد        | 56         | On bottle PZ-15I                 |
| 1W-11S                      |                   | 15:15             |                              | $\Pi$       | 2                | X         |           |            |          |           |  |            | 1                 | 100      |               |        |            |            |                                  |
| 1w-115 Duc                  |                   | 15:16             | $\sqcap$                     | 11          | 2                | X         |           |            | 1        |           |  |            |                   |          |               |        |            |            |                                  |
| 1WB-3                       |                   | 15:30             |                              |             | 2                | X         |           | 1          | 1        | <b>†</b>  | 1  |            |                   | <b>†</b> |               |        |            |            |                                  |
| MWC-3                       |                   | 15:40             |                              | $\top$      | 2                | X         |           |            |          | 1         | 1  |            | <b>†</b>          | 1        | $\top$        |        |            |            |                                  |
| 1WA-3                       | V                 | 16:00             | V                            | TV          | 2                | X         |           |            |          |           |  |            | 1                 |          |               |        |            |            | and of                           |
|                             | Bottles Re        | iquished under    | Airbill No                   | . 4         | 287              | 495       | 77        | 498        | Sample   | Relingui  | shed under                                       | Airbill No | . 8               | 0249     | 53            | 46     | 2          |            | Temperature (corrected) C 10:100 |
| proprior Proceed            | Relinquisi        | ed by:            |                              | 1           | Date             |           | Time:     |            | Receive  | d by:     |  | _          | ,                 | Date:    |               | Tim    | <b>M</b> : |            | Custody Soul Intact?             |
| ,                           | 190               | red V-            | Male                         | <u> </u>    | 10/              | 17/98     |           |            | 1/4      | Fale      | ~ [ /  | 300/       |                   | 10.16    | .58           | 12     | 2/3        | 3          | Yes No                           |
|                             | Relinquisi        | ed by:            |                              |             | Dete             |           | Time:     |            | Receive  | d by:     |  |            |                   | Date:    |               | The    | 861        |            | Custody Seni Intact?             |
| r ID #                      |                   |                   |                              |             |                  |           |           |            |          | $\bigcap$ |  |            |                   | ļ        |               |        |            |            | Yes No                           |
| A sampling complete?        | Relinquis         | ed by:            |                              |             | Date             | :         | Time:     |            | Receive  | a for Lab | oretory#9:                                       | 11         |                   | Detey    | 1             | Tie    | M;         |            | Custody Seal Intact?             |
| Yes No                      |                   |                   |                              |             |                  |           | l         |            | 1 1      | HUS       | D 70   | m          | 21                | 10/1     | 7/4K          | 9 /    | 1) .6      | 100        | Yes No                           |
|                             |                   | C                 | hrysler (                    | Corpora     | tion 8           | 00 Chrys  | ler Dri   | e, CIM     | S 482-00 | -51, Aub  | urn Hills,                                       | Michiga    | in 48326          | -2757    | <i>9.2.</i> ¥ | 17     |            |            |                                  |
|                             | Distribu          | ion: White cop    | py: Data                     | packag      | ge Yel           | llow : Re | tained by | y laborate | ory Pinl | k: Retair | ned by say                                       | npler      |                   |          |               |        |            | <u> </u>   | k Sealed                         |
| /                           | _                 | les,              | $\sim$ /                     | •           | 4                | <b>/</b>  |           | Sto        | 000      | 11        | D 4  | -          |                   |          |               |        |            | (          | Sample: Total                    |
| 5                           | MA                | 101               | VIA                          | Cl          | 20               | w         | _ ر       | 100        |          | - 1       | _ /  |            |                   |          |               |        |            | -          | Scaples Interf<br>Cook- temp 60  |
|                             | e my              | ~ )               |                              |             |                  |           |           | 2          |          | S         | E 19   | 14/0       | p                 |          |               |        |            |            | . –                              |
| Revision No. 1              | 1                 | ·                 |                              |             |                  |           |           |            |          | U         | C/7  | 11/0       | nam               |          |               |        |            |            | Page I of 5                      |
| 148 14111111 123            |                   |                   |                              |             |                  |           |           |            |          |           |  | 1100       | 7) <b>/8</b> /4 = |          |               |        |            |            |                                  |

Revision No. 1 (Teated, September 23, 1997)

| CHRYSL CORPOR                                  | ER                |                   |                              |             |                 |                |   |                |           | (                                  | Cha        | in-o                | f-Cı       | ısto   | dy           |              |                       |          | 03/35 A                               |
|--|-------------------|-------------------|------------------------------|-------------|-----------------|----------------|---|----------------|-----------|------------------------------------|------------|---------------------|------------|--------|--------------|--------------|-----------------------|----------|---------------------------------------|
| WAY CORPOR                                     | RATIO             | )N                | 4/                           | 40          | te              | GW.            | Sun   | oling<br>Prott |           |                                    |            |                     |            |        |              |              |                       |          |                                       |
| npuChem  |                   | Project           | Name:                        | Deyl        | <u>lon</u>      | Therm          | na/   | Prott          | ucts      |                                    |            |                     | Luge       | He. 1  | 8071         | 400          | / <u>;</u>            | <u> </u> | Them, Ince                            |
| Madison Avenue                                 |                   |                   |                              |             |                 |                |   |                |           | Address: $\sqrt{12/0}$ W. (p. Rd.) |            |                     |            |        |              |              | . 6                   | 3        |                                       |
| ry, NC 27513<br>one Number: 1-800-833-5097     |                   |                   | e Code:<br>Jumber:           |             | SCOR            | 980            | 2766  | <del></del>    |           | St Faul MN. SI                     |            |                     |            |        |              |              | 7//                   |          |                                       |
| Number: (919) 379-4050                         |                   | l                 | sler PM:                     |             | ory             | Senz           |   | 7-/            |           |                                    | Consu      | ltant PM:<br>Phone: | Ken        | 4401   | e L          | _            |                       | F        | ex: 651-490-1006                      |
| m-around Time Request:                         | Data Pack         | age Deliverat     |                              |             | <del>~/</del> 1 |                |   | nd List-       | Paramete  | r/Method                           | /Bottle    |                     |            |        | 70           | •            |                       |          | Matrix Codes                          |
| calendar hrs.                                  | Chrysler Le       | evel 1            | `                            | ŕ           | . [             |                |   |                |           |                                    |            | .,,,                |            | Ť      | S-           | Soil         |                       |          | SW - Surface Water                    |
| calendar hrs.                                  | Chrysler Le       |                   |                              |             | 1               |                |   |                |           |                                    |            |                     |            |        | 1            | √ - Gt       |                       |          | r A-Air '                             |
| days<br>days                                   | Other (spec       | шу):              |                              |             | 1               |                |   | \ '            |           | l l                                |            |                     |            |        |              | I Se<br>Othe |                       |          |                                       |
| uavs   | <del></del>       |                   |                              |             |                 |                |   | }              |           |                                    |            |                     |            |        | _            | d Us         |                       | _        |                                       |
|  | 1                 |                   |                              |             | 2               |                | Ì   |                |           | ļļ                                 |            | ļ                   |            |        | ~            |              |                       | 7        |                                       |
|  |                   |                   | . (2)                        | U           | of Containe     | 03             | <br>  |                |           |                                    |            |                     |            |        | 77           | 7 >          | 1 > 12                |          |                                       |
|  |                   |                   | Grab (G) or<br>Composite (C) | Matrix Code | Jo #            | 958            |   |                |           |                                    |            |                     |            |        | Volatiles pH | Metals pH    | lde pi                |          |                                       |
| Field Sample Identification                    | Date<br>Collected | Time<br>Collected | 1 2 5                        | Ast         | Total#          | 7              | •   | 1              |           |                                    |            | }                   | 1          |        | 3            | 1            | Cyande                | 췽        | Remarks                               |
| MWA-3 MS/MSP                                   | peacy             | <del></del>       |                              | EW.         | 2               | メ              |   | 1              | 1-        |                                    |            | <b></b> -           | <b>+</b>   | +      | 12           |              |                       |          |                                       |
| PZ-14I   | 10/14/9           |                   |                              |             | 2               | X              |   |                |           | <u> </u>                           |            |                     |            | 1      | 十            |              |                       |          |                                       |
| MWA-2  |                   | 16:25             |                              |             | 2               | X              |   |                | }         |                                    |            |                     |            |        |              |              |                       |          |                                       |
| MWA-2 MS/MSD                                   |                   | 16:26             |                              |             | 2               | X              |   |                |           |                                    |            |                     | 1          |        | +            | 1            |                       |          |                                       |
| PZ-16D   |                   | 16:30             |                              |             | 2               | X              |   |                |           |                                    |            |                     |            |        | $\top$       |              |                       |          |                                       |
| MWB-6  | 10/15/            | 27:55             |                              |             | 2               | X              |   |                |           |                                    |            |                     |            |        |              |              |                       |          |                                       |
| MW-8S  |                   | 8:15              |                              |             | 2               | X              | <u> </u>                                      |                |           |                                    | <u> </u>   |                     |            |        |              |              |                       |          |                                       |
| E101598-3                                      | $\bot\bot$        | 8:17              |                              | 11          | 2               | X              |   |                |           |                                    |            |                     |            |        |              |              | _                     |          | Equipment blank                       |
| PZ-8I  |                   | 8:20              |                              |             | 2               | X              |   |                |           |                                    | J          |                     |            |        |              | <u> </u>     |                       |          |                                       |
| PZ-80  | V                 | 8:25              | L V                          |             | , 2             | $\perp \times$ |   |                |           |                                    |            |                     |            |        |              |              |                       |          | open de de la viso                    |
| Appler(s)                                      | Bottles Rel       | lquished under A  | Lirbill No.                  | 42          | 187             | 495            | <u> 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7</u> | 198            | Samples   | Relinquis                          | hed under  | Airbill N           | <u>. 8</u> | 0249   | 53           | 46.          | 2                     |          | Temperature (corrected) C 10/17/47    |
| your Incell                                    | Relinquish        | well              | usa                          | er          | Deter           | 15/48          | Time:   |                | Receive   | He                                 | - /3       | 0016                | <b>.</b>   | Date:  |              | Ti           | 150:                  |          | Custody Seel Intact? Yes No           |
|  | Reitnquish        | ed by:            |                              |             | Dute            | :              | Time:   |                | Receive   |                                    |            |                     |            | Dates  |              | Tie          |                       |          | Castedy Seal Intact?                  |
| oeler ID #                                     |                   |                   |                              |             |                 |                |   |                |           | Δ_                                 |            |                     |            |        |              |              |                       |          | Yes No                                |
| RFA sampling complete?                         | Relinquish        | ed by:            |                              |             | Date            | \$             | Time:   |                | Receive   | ed for Labo                        | rittery by | <i>[[]]</i>         |            | Date:  | / /          | 7 TI         | <b>1940:</b><br>(2) ' | 400      | Custody Seel Intact?                  |
|  |                   | Cl                | rysler C                     | orpora      | tion 8          | 00 Chry        | sler Dri                                      | ive, CIM       | S 482-00- | -51, Aubu                          | ırı Hills  | , Michig            | an 4832    | 6-2757 |              |              |                       |          |                                       |
|  | Distributi        | ion: White cop    | y: Data                      | packag      | e Yel           | llow : Re      | tained t                                      | y labora       | tory Pink | k: Retain                          | ed by sa   | mpler               |            | CK     |              | 50           | al.                   | ad       | Samples inland                        |
|  | 5                 | and               | es:                          |             | ac              | est            | i   |                | Store     | ago                                | 2 1        | D                   |            | ,      |              |              | ,                     |          | eng 6° (vs)                           |
|  |                   |                   | _ /                          |             | 4               | 1 =            | <u>}</u>                                      | 10/17/         | 198       | 0                                  |            |                     |            |        |              |              |                       |          | Page 2 of 3                           |
| Revision No. 1<br>One field September 23, 1997 |                   |                   |                              |             | /               |                |   | 11             | 300       |                                    |            |                     |            |        |              |              |                       |          | · · · · · · · · · · · · · · · · · · · |

| <b>∠</b> CHRYSL                          | .ER                          |                   |                              |                   |          |          |               |              |                | +             | Cha  | in-of  | f-Cu           | stod           | y            |       | ļ                   | 03736  | $6 \mathbf{A}$ |
|--|------------------------------|-------------------|------------------------------|-------------------|----------|----------|---------------|--------------|----------------|---------------|--|--|----------------|----------------|--------------|-------|---------------------|--|----------------|
| CHRYSL                                   | RATIO                        |                   | 41                           | 40                | tr. C    | کے ۔سکو  | ample         | 194          | <del></del>    |               |  |  |                |                | <u> </u>     |       |                     |  |                |
| mpuChem                                  |                              | Project           | Name:                        | Dayt              | un 7     | he.m     | ·1'Pi         | Solue        | B              |               | Con  | sultant:   | Legge          | He. K          | No. 1        | The.  | 4-18                | Graham Inc   | 0              |
| Madison Avenue                           | {                            | Site Lo           | cation:                      | Da,               | lton     | OH       |               |              |                |               | Address: MO W. Co. Rd. E                         |  |                |                |              |       |                     |  |                |
| ry, NC 27513                             | }                            | Site              | Code:                        |                   | 00       |          |               |              |                |               | St. Paul, MN.                                    |  |                |                |              |       |                     |  |                |
| one Number: 1-800-833-5097               | Į.                           | RFA N             |                              |                   |          | P950     |               | 4-7          |                |               | Consultant PM: Ken Vsq e/<br>Phone: 65/-440-1405 |  |                |                |              |       |                     | - 7 <del>- 7</del> - 7 <del>- 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - </del> |                |
| Number: (919) 379-4050                   | Data Basha                   | Chrysl            |                              | <u>Ga</u>         | <u> </u> | Stang    |               |              |                |               |  |  |                |                | - /4         | 01    |                     | Fax: 651-490-1000  | <u>5</u>       |
| rn-around Time Request:<br>calendar hrs. | Data Packag<br>Chrysler Leve |                   | es: (cur                     | cie)              | }        | <u>C</u> | mpound        | d List-Pa    | rameter        | Method        | l/Bottle   | Type/Pre   | servativ       |                | S - S        | e il  |                     | Matrix Codes<br>SW - Surface Water                                   |                |
|  | Chrysler Leve                |                   |                              |                   | ļ        | Ì        | ļ             | Ì            | Ì              | l             | - }  | l  | Ì              |                |              |       | wendwa              |  |                |
| calendar hrs.                            | Other (specifi               |                   |                              |                   | 1        |          |               | }            | - 1            |               |  |  |                | ļ              | Sed.         | - Sec | liment              |  |                |
| days                                     |                              |                   |                              |                   |          | - 1      |               | 1            |                |               |  | 1  | 1              |                |              |       |                     | (b) Sparge Water   |                |
|  | <del></del>                  | <del></del>       |                              |                   |          | Ì        | 1             | 1            |                | Ì             |  |  | 1              |                | Lal          | b Use | Only                | ' '  |                |
|  | }                            | İ                 |                              |                   |          | 1        |               | 1            |                |               |  |  |                |                |              | 9     | N,                  |  |                |
|  |                              | 1                 | ତ                            |                   | Contract | 0        | 1             |              | l              | ì             |  | i  |                |                |              | 7     | ا ۸                 |  |                |
|  | {                            | -                 | g g                          | 👸                 | ျှင      | 826      | l             | 1            | ł              |               |  |  |                |                | T.           | 띰     |                     |  |                |
|  | \ \ \                        | 1                 | 9 8                          | ×                 | #        | 9        | j             |              | 1              |               |  |  |                |                | 1            | 4     |                     |  | •              |
| Field Sample Identification              | Data<br>Collected            | Time<br>Collected | Grab (G) or<br>Composite (C) | Matrix            | Total    | Ì        | 1             |              | · \            |               |  | \ \ \ \  |                |                | Volatiles pH | Metab | Cyenide PH<br>Other | Remarks  |                |
| 82-9D                                    | 10/15/98                     | 8:50              | G                            | CW                | 2        | X        |               |              |                |               |  |  |                |                |              |       |                     |  |                |
| MW-105                                   | 1                            | 9:30              | Ī                            | 1                 | 2        | X        |               |              |                |               | <del>                                     </del> |  |                |                | 1            |       |                     |  |                |
| PZ-10 I                                  |                              | 9:35              | _                            | 11                | 2        | X        |               |              |                |               |  | <del> </del>                                     |                |                | +-           | 1-1   |                     |  |                |
| PZ-17D                                   |                              | 10.10             |                              | $\dagger \dagger$ | 2        | X        |               | <b></b>      | <del></del>    |               | <del> </del>                                     | <del> </del>                                     | <del> </del>   |                | $\top$       | 1-1   | _                   |  |                |
| PZ- 17 T                                 | 1-1-                         | 10;20             | -                            | ++-               | 2        | メ        |               | <del> </del> | <del> </del>   |               | <del> </del>                                     | <del>                                     </del> | <del> </del>   | -              | ╁            | +-+   |                     | +  |                |
|  | +                            | 11:00             |                              | ++-               | 2        | X        | <del></del> - | <del> </del> |                | <b></b> -     | <del>                                     </del> | <del> </del>                                     | <del> </del>   | <del> </del> - | ╁            | +-+   | $\dashv$            | +  |                |
| MWA-1                                    |                              | 14:15             | 1                            | 1                 | 2        | X        |               | <del> </del> | <del> </del> - | <del> </del>  | <del>                                     </del> | ╁──  | ┼──            | ┼              | +-           | +     | $\vdash$            |  |                |
| MW A - 4                                 |                              | 16'45             | -                            | 0                 | 2        | ×        | Time          | ada          | 10/            | 10. 7         | 1  | Stran  | 19             | 19/9           | +-           | +     |                     |  |                |
| Sparge H20<br>MW-205                     | inlylag                      | 10:45             | -                            | +~                | 3        | ×        | lime          | 1000         | es p           |               | eve.   | xus.   | 41. 10         | X/7/71         | 9            | +     |                     |  |                |
| 110-103                                  | 101.11.10                    | ,,,,,,            | 1                            | +                 | +-       |          | }             | <del> </del> |                | <del>}</del>  | <del>}</del>                                     | <del>                                     </del> | <del> </del> - | ┼              | +            | 1     | 1                   |  |                |
| ampler(s)                                | Bottles Reliqu               | uished under A    | irbill No.                   | 42                | 87       | 4957     | 749           | R            | Samples        | Relinquis     | hod under  | Airbill No                                       | Bo             | 249            | 5 3          | 46    | 2                   | Temperature (corrected) 40 C   | 00/17/         |
| Manpler(s)                               | Relinguished                 | ٠ : تروا          | 0                            |                   | T.,      |          |               |              | Received       |               |  |  |                | Date:          |              | Tim   |                     | Centedy Soul Intact?   |                |
| ι  | You                          | rich              | Ju.                          | rall              | 119      | 1448     | 1             |              |                |               |  |  |                |                |              | 1_    |                     | Yes No   |                |
|  | Relinquished                 |                   |                              |                   | Date     |          | Time:         |              | Received       | l by:         |  |  |                | Date:          |              | Tie   |                     | Custody Soni Intact?   |                |
| ooler ID #                               |                              |                   |                              |                   | 1        |          | 1             |              | 1              | ^             |  |  |                |                |              |       |                     | Yes No   |                |
| RFA sampling complete?                   | Relinquished                 | l by:             |                              |                   | Date     |          | Time:         |              | Receive        | d for Labo    | oratory by                                       |  | <del></del>    | Date:          |              | Tin   | në:                 | Custody Seal Latnet?   |                |
| (Ses) No                                 |                              | •                 |                              |                   |          |          |               |              | 0              | Mus           | 1 /5   | Un   | 100            | 10/1           | 191          | 1     | 7:40                | (Yes) No   |                |
|  |                              | Ch                | rysler C                     | Corpora           | tion 8   | 00 Chrys | ler Drive     | e, CIMS      | 482-00-        | 51, Aubi      | urn Hills  | , Michigo  | an 48326       | -2757          |              |       |                     |  |                |
|  | Distributio                  | n: White cop      | y: Data                      | packag            | e Yel    | low : Re | ained by      | laborato     | ry Pink        | Retain        | ed by sau  | mpler  | C              | /c             | 5            | eur   | led                 | That of Bage 3 of 3  |                |
|  | _                            |                   |                              | /                 |          | 1        | -             |              | /              |               | _  |  |                | San            | مر           | معا   | 4                   | Mart o   |                |
|  | Sam                          | Ma                | ,                            | 7/1               | 00       |          | 111.          | 5            | torg           | 295           | 2  |  |                | 1.             |              |       | /-                  | 6  |                |
|  | June                         | peces             | - p                          | , a               |          |          | 100           |              | , ,            | 1             | _  |  | (              | 00             | <i>/</i> u   | 1     | u                   | 7 2 2  |                |
| Revision No. 1                           | /                            | 17                | '4                           | /                 | 05       | 10/17    | 1/48          |              |                | $\mathcal{I}$ |  |  |                |                |              |       | ,                   | L-∠<br>Late in or n'   |                |
| Cremed September 23, 1997                |                              | 1 !/              | /                            |                   |          | ,,,      | 111110        |              |                |               |  |  |                |                |              |       |                     |  |                |

#### **MEMORANDUM**

To: Mark Bevan

Kenny McDaniel Brian Neptune Roy Sutton

From: Diane Ellmore

Date: October 19, 1998

Re: Case 33902

#### **SDG 25401**

CCN: 914740 ID corrected in LIMS. ID is now MW-7S

CCN: 914730 ID corrected in LIMS. ID is now MWA-6DUP

SDG 25403

CCN: 914888 Sample logged into LIMS on 10/19/98 due to ID discrepancy on

COC verses bottle labels. Sample is backdated in LIMS to

10/17/98 (actual receipt date).



### **LOG-IN VERIFICATION**

| ,   | ·              |              |                  |
|---|----------------|--------------|------------------|
| Client: Chysles   | Project: RFA   | 254          |                  |
| Case: 33902   | Date Received: | 10/17/98     | - ,.             |
| Were all sample I.D.'s checked?   |                | Yes No       | erioctive action |
| Were all analyses on COC also on rec  | ceipt log?     | Yes No       |                  |
| Were any associated line item's missi   | ng?            | Yes / No     |                  |
| Were all parameter's logged in?   |                | Yes/ No      |                  |
| Were correct method numbers receive   | d?             | Yes / No     |                  |
| Is any information absent from receiving  | ng log header? | Yes No       |                  |
| Were all blank lines on the receiving lo  | og z'ed out?   | Yes / No     |                  |
| Was TAT verified (quick turn line item  | ns used?)      | Yes / No     |                  |
| Was QC designated and verified?   |                | Yes No /     | N/A              |
| Is the field COC complete (signed/date  | ed, etc)?      | Yes / No     |                  |
| Were all comments/issues recorded on  | COC?           | Yes/ No      | ·                |
| Signature: Jan Elmol  | Date: _        | 10/19/98     |                  |
|   | ···            |              |                  |
| Corrective A  | action         |              |                  |
| Changed ID In Mui-75 In M   | W-78 Change    | ed ID on cal |                  |
| 914720 from Mino-1- + Min   | 1A -10 DIVO    | Sa la Di     |                  |
| HALLOCE LANGE TO THE  | 1 dot 1 1 1    | to de la     |                  |
| CCH 717888 RC 0 10/19 & Da  | UR I I A       | 11/ aue 70   |                  |
| Changed ID for Mw-75 to M<br>914730 from MwA-6 to Mu<br>CCH 914888 red 10/19 & ba<br>ID disrepency on CU: & b | ottle labels   |              |                  |
|   |                | _            |                  |
|   |                |              |                  |
| Completed By: Same Ellin  | Nove Date:     | 10/19/98     | 1 2              |

LEGGETTE BRASHEARS & GRAHAM ATTN: MR. KEN VOGEL 1210 WEST COUNTY Rd. E, STE700 ST. PAUL, MN 55112

RECEIVE DATE:

QUOTE NUMBER:

10/17/98 98-00070800000501112

ORDER NUMBER:

33902

| SAMPLE ID   | TURNAROUND** TIME | ANALYSIS                              | COMPUCHEM<br>NUMBER |
|-------------|-------------------|---------------------------------------|---------------------|
| E101498-1/  | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case   | ID 914726           |
| E101498-2 🗸 | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case   | ID 914753           |
| E101598-3 🗸 | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case   | ID 914764           |
| MW-108~     | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case   | ID 914768           |
| MW-115 V    | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case   | ID 914754           |
| MW-11SDUP/  | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case   | ID 914755           |
| MW-158 🗸    | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case   | ID 914752           |
| MW-18S/     | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case   | ID 914737           |
| MW-198/     | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case   | ID 914734           |
| MW-20S V    | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case   | ID 914777           |
| MW-75-78    | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case   | ID 914740           |
| MW-85       | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case   | ID 914763           |
| MWA-1·      | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case   | ED 914774           |
| MWA-2 ✓     | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case   | ID 914760           |
| MWA-3:✓     | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case   | ID 914758           |
| MWA-4:/     | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case   | ID 914775           |
| MWA-5✓      | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case   | D 914743            |
| MWA - 6 🗸   | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case   | ID 914744           |
| MWA-GOUP /  | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case   | ID 914746           |
| MWB-1       | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case   | D 914730            |
| MWB-2 ✓     | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case   | D 914738            |
| MWB-3 ✓     | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case 1 | D 914756            |
| MWB-4/      | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case   | D 914732            |
| MWB-5       | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case 1 | D 914742            |
| MWB-6       | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case 1 | D 914762            |
| MWC-1       | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case 1 | D 914729            |
| MWC-2       | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case 1 | D 914739            |
| MWC-3√      | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case 1 | D 914757            |
| PZ-10I 🗸    | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case I | D 914769            |
| PZ-12D 🗸    | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case I | D 914751            |
| PZ-12I ✓    | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case I | D 914750            |
| PZ-13I/     | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case I |                     |
| PZ-14I 🗸    | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case I | D 914759            |
| PZ-16D 🗸    | 10                | TCL Voa/Meth. 8260(25ml)/Water/Case I | D 914761            |

<sup>\*\*</sup> Please note that turnaround time and sample due dates will be, whenever applicable, calculated and determined by the last sample received in a Sample Delivery Group.



LEGGETTE BRASHEARS & GRAHAM

PAGE

2

ATTN: MR. KEN VOGEL

1210 WEST COUNTY Rd. E, STE700

ST. PAUL, MN 55112

RECEIVE DATE:

10/17/98

QUOTE NUMBER:

98-00070800000501112

ORDER NUMBER:

33902

| SAMPLE ID    | TURNAROUND** |           | ANALYSIS              | COMPUCHEM<br>NUMBER |        |  |  |  |  |
|--------------|--------------|-----------|-----------------------|---------------------|--------|--|--|--|--|
| PZ-17D 🗸     | 10           | TCL Voa/M | Meth. 8260(25ml)/Wate | er/Case ID          | 914770 |  |  |  |  |
| PZ-17I √     | 10           | TCL Voa/M | Teth. 8260(25ml)/Wate | er/Case ID          | 914773 |  |  |  |  |
| PZ-19IV      | 10           | TCL Voa/M | eth. 8260(25ml)/Wate  | er/Case ID          | 914735 |  |  |  |  |
| PZ-20D 🗸     | 10           | TCL Voa/M | Weth. 8260(25ml)/Wate | er/Case ID          | 914736 |  |  |  |  |
| PZ-21I~      | 10           | TCL Voa/M | eth. 8260(25ml)/Wate  | er/Case ID          | 914733 |  |  |  |  |
| PZ-22I 🗸     | 10           | TCL Voa/M | eth. 8260(25ml)/Wate  | er/Case ID          | 914731 |  |  |  |  |
| PZ-7I        | 10           | TCL Voa/M | eth. 8260(25ml)/Wate  | er/Case ID          | 914741 |  |  |  |  |
| PZ-8D 🗸      | 10           | TCL Voa/M | eth. 8260(25ml)/Wate  | er/Case ID          | 914766 |  |  |  |  |
| PZ-8I 🗸      | 10           | TCL Voa/M | eth. 8260(25ml)/Wate  | er/Case ID          | 914765 |  |  |  |  |
| PZ-9D 🗸      | 10           | TCL Voa/M | eth. 8260(25ml)/Wate  | er/Case ID          | 914767 |  |  |  |  |
| Spargeh20 🗸  | 10           | TCL Voa/M | eth. 8260(25ml)/Wate  | r/Case ID           | 914776 |  |  |  |  |
| TBLK101498 / | 10           | TCL Voa/M | eth. 8260(25ml)/Wate  | er/Case ID          | 914747 |  |  |  |  |

914888 ST Jahren July all of the control of the con

X 19

<sup>\*\*</sup> Please note that turnaround time and sample due dates will be, whenever applicable, calculated and determined by the last sample received in a Sample Delivery Group.

RFA 254

| Date Batched    | 10/20/98 |     | _ |
|-----------------|----------|-----|---|
| Case 3390Z . 29 |          |     |   |
| Instrument Code |          | 113 |   |

ar

|     | LINKER      | W8260                 |          |  | TAT _  | 10    | _ sow    |         |          |       |                            |          |          |
|-----|-------------|-----------------------|----------|--|--------|-------|----------|---------|----------|-------|----------------------------|----------|----------|
| ſ   | CCN         | CLIENT ID             | QC       | SAMPLE                                       | ρН     | TIME  | DATE     | INST.   | OPERATOR | HVT   | VOLUME/                    | SCREEN   | ANALYSIS |
| ļ   |             |                       | TYPE     | ORIGINAL                                     |        |       | RUN      |         |          |       | INSTRUCTIONS               | BOTTLE # | BOTTLE # |
| 1)  | 914727      |                       | દડ       | 914758                                       |        | 0039  | 10.23.98 | 54      | 2230     |       | 1355/1044                  | 01       | ol       |
| 2)  | 914728      |                       | ೭೭       | 914758                                       |        | 0113  | <u> </u> | 1       |          |       |                            | of       | of       |
| 3)  | 414726      | E101498-1             |          | ļ  | 1      | 1041  | 10.21.98 | 54      | 2347     | 10/28 |                            | ol       | of       |
| 4)  | 914729      | MMC-I                 |          |  |        | 1838  | 112.068  | 54      | 2543     |       | RW                         | of       | ol       |
| 5)  | 914730      | MWB-1                 |          |  | 1      | 1485  |          |         |          |       | IZN                        | 10       | of       |
| 6)  | 914731      | PZ-2ZI                |          |  |        | 1558  |          |         |          |       |                            | of       | of       |
| 7)  | 914732      | MWB-Y                 |          |  |        | 7235  | J        |         | <u> </u> |       |                            | 01       | of       |
| 8)  | 414733      | PZ-21I                | <b></b>  |  | 1      | 1116  | 10.21.98 | 54      | 2347     |       |                            | 01       | of       |
| 9)  | 914734      | MW-198                |          |  | 1      | 1151  |          |         | <u> </u> |       |                            | ol       | of       |
| 10) | 914735      | PZ-19I                |          | <u>                                     </u> | 1      | 1226  |          |         |          |       |                            | of       | -01      |
| 11) | 914736      | PZ-ZØD                |          | <u> </u>                                     |        | 1300  | ↓        | V       | V        |       |                            | of       | of       |
| 12) | 914737      | MW-18S                |          |  | 1      | 1624  | 1021781  | 5 Y     | 2234     |       | 7.50 ui                    | of       | of       |
| 13) | 914738      | MWB-Z                 |          |  | 1      | 13000 | 10.21.98 | 54      | 2347     |       | RN                         | of       | of       |
| 14) | 914739      | MWC-Z                 | <u> </u> |  | 1      | 1519  |          |         | 1        |       |                            | of       | of       |
| 15) | 914740      | MW-78 Enicledist      | <u> </u> | <u> </u>                                     | 5      | 1858  | 102199   | 54      | 2230     |       | 125 mc                     | of       | of       |
| 16) | 914741      | PZ-71                 |          |  |        | 1711  | 102196   | 54      | 2230     |       | RN                         | of       | ol       |
| 17) | 914742      | MWB-5                 |          |  |        | 1745  |          |         |          |       | RN                         | of       | . of     |
| 18) | 914743      | MWA-S                 |          | <br>   | 1      | 1934  | 6        | 1       |          |       | 25006                      | of       | 10       |
| 19  | 914744      | Mw-6                  | ·        |  | 1      | 2149  | 1022.16  | 54      | 2270     |       | InL                        | lo       | of       |
| 20  | 914745      | PZ-13I                |          |  | 1      | 2223  |          |         |          |       | 500uC                      | 10       | of       |
| 21  | 914746      | MWA-GDUP              |          |  | Ī      | 2257  | _11      |         |          |       | Lar L250m                  | of       | of       |
| 22  | 914758      | MWA-3                 |          |  | 1      | 2331  | V        | 1/      | ,        |       | USE 91475&<br>YSOUL FOR OC | of       | of       |
| 23  | 915022      | VLCS 69               | LCS      |  |        | 0951  | 10.21.98 | 54      | 2347     |       |                            | of       | of       |
|     | Relinquishe | d By <u>Laf</u> L     |          | Date _                                       | 101    | 7041  | Rccei    | ved By  | MB       |       | Date                       | 102068   |          |
|     |             | d By MA               |          | Dato _                                       |        | 2041  | Recei    | ived By | Lot      | 2     | Date                       | 102098   |          |
|     | Relinquisho | d By Ref <sup>2</sup> |          | Date _                                       | 10.2   | 1.98  | Rocoi    | ived By |          | ·     | Date                       | 10.21.48 |          |
|     |             | KP                    | <b>-</b> |  | 10.21. |       |          |         | Alen     | ~     | ,                          | 102198   |          |
|     | Log Pago U  | pdated                | Aples    | γι <del>ν</del>                              | 1021   | 96    |          |         | pol      | 2     | _                          | 102198   |          |

| Date Batched    |  |
|-----------------|--|
| Case            |  |
| Instrument Code |  |

| LINKER       | W8260       |      |          | TAT_     | <u>-</u>   | SOW                |        |          |     |              |          |             |
|--------------|-------------|------|----------|----------|------------|--------------------|--------|----------|-----|--------------|----------|-------------|
| CCN          | CLIENT ID   |      | SAMPLE   | ρН       | TIME       | DATE               | L      | OPERATOR | H/T | VOLUME/      | SCREEN   |             |
|              | <del></del> | TYPE | ORIGINAL | <b></b>  | ļ <u>.</u> | RUN <sub>0,2</sub> | 784    | •        |     | INSTRUCTIONS | BOTTLE   | BOTTLE      |
| 91473DR      |             |      |          |          | 0005       | 1027318            | 54     | 2230     |     | Bank         | of       | of          |
| 915825       | 111539      |      |          |          | 2104       | 102298             | 54     | 2230     |     |              | of       | of          |
| 9147448      | '           |      |          |          | 0147       | 10.23.98           |        | 1        |     | 250 ul       | lo       | of          |
| 9147588      |             |      | <u> </u> |          | 0221       |                    | 54     | 2230     |     | 275 ml       | of       | 10          |
|              |             |      |          | <u> </u> |            |                    |        |          |     |              | of       | of          |
|              |             |      |          |          |            |                    |        |          |     |              | 01       | of          |
|              |             |      |          |          |            |                    |        |          |     |              | _01      | 10          |
|              |             |      |          |          |            |                    |        |          |     | <i>Y</i>     | of       | of          |
|              |             |      |          |          |            |                    |        |          |     |              | of       | of          |
|              |             |      |          |          |            |                    |        |          |     |              | ol       | -01         |
|              |             |      |          |          |            |                    |        |          |     |              | ol       | of          |
|              |             |      | Ţ        |          |            |                    |        | 1        |     |              | of       | of          |
|              |             |      |          |          |            |                    | 1      |          |     |              | of       | ol          |
|              |             |      |          |          |            |                    |        |          |     |              | of       | 10          |
|              |             |      |          |          |            |                    |        |          | 1   |              | of       | 10          |
| ·            |             |      |          |          | 1          |                    |        |          |     |              | 01       | of          |
|              |             |      |          | 7        |            |                    |        |          |     |              | ol       | * 01        |
|              |             |      |          |          |            |                    |        |          | 1   |              | of       | of          |
|              |             |      |          |          |            |                    | 1      |          | 1   |              | 10       | of          |
|              |             |      |          |          |            |                    |        |          | 1   |              | 10       | of          |
|              |             | 7    |          |          | 1          | 1                  | 1      |          | 1   | <u> </u>     | 01       | 01          |
| )            |             |      |          | 1        | <u> </u>   | 1                  | 1      |          | 1   | †            | ol       | 01          |
| )            | -           | _    |          |          |            |                    | +==    |          | +=  | 10-23.981    |          | 01          |
| Relinquished | By 1/2      | -    | Date     | 1022     | 14         | Recei              | ved By | File on  |     |              | 102278   | <del></del> |
| Relinquished | ,           | プレイン | Date     | 102      | -2 ye.     | Recei              | ved By | Ref2     |     |              | 10.22.98 |             |
| =            | Ву          |      |          |          |            |                    |        |          |     |              |          |             |

Log Pago Updated \_\_\_\_\_

Mark

# INTERNAL CHAIN-OF-CUSTODY

| Lab          | ooratory:  | VOA             | <del></del>     | Requested By:  | KM                             |
|--------------|------------|-----------------|-----------------|----------------|--------------------------------|
| Wa           | ter        | Soil P.E        |                 | Date: 10/20/98 | Shift: 1 2 Sa                  |
| EPA          | ٩          | Commercial      | _               |                | circle one                     |
|              | CCN        | RECEIPT<br>DATE | PRES.           | PARAMETER      | BOTTLE NUMBER                  |
| 1            | 914726     | 10/17           |                 |                | 1-3 of 2-3                     |
| 2            | 1 729      |                 | ,               |                | 1-3 of 2-3                     |
| 3            | 730        |                 |                 |                | 1-3 of 2-3                     |
| 4            | 731        |                 |                 |                | 2-2 of 3-3                     |
| 5            | 732        |                 |                 |                | 1-3 of 2-3                     |
| 6            | 733        |                 |                 |                | 1-3 of z-3                     |
| 7            | 734        |                 |                 |                | 2-3 of 3-3                     |
| 8            | 73.5       |                 |                 |                | 1-3 of 2-3                     |
| 9            | 736        |                 |                 |                | 2-3 of 3-3                     |
| 10           | 737        |                 |                 | ·_·            | 1-3 of 2-3                     |
| 11           | 739        |                 |                 | <del> </del>   | 2-3 of 3-3                     |
| 12           | 740        |                 |                 |                | 1-3 of 2-3                     |
| 13           | 741        |                 |                 | ·····          | 2-3 of 3-3                     |
| 14           | 742        |                 |                 | <del></del>    | 1-3 of 2-3                     |
| 15           | 743        |                 |                 |                | 1-3 of 2-3                     |
| 16           | 745        |                 |                 |                | 1-3 of 2-3                     |
| 17           | 746        |                 |                 |                | 1-3 of 2-3                     |
| 18           | 758        |                 |                 |                | 1-4 of 2-4                     |
| 19           | 738 ′      |                 |                 |                | 1-3 of 2-3                     |
| 20 -         | 1 744      | 7               |                 |                | 1-3 of 2-3                     |
| Relinqı      | uished Nov | Date: Lt        | Ri<br>Plantov B | eceived        | Date:_ <i> \overline{\psi}</i> |
| 3y:          | N. VOI     | Date: 2         | 120/20          | 1              | Date. 10 3-41                  |
| Daline:      | , richad   |                 | D               | eceived        |                                |
|              | uished     | Date:           |                 | /:             | Date:                          |
| · <b>J</b> · |            | Date            |                 |                |                                |
| Comm         | nents:     |                 |                 | <u> </u>       |                                |
|              | <u> </u>   | •               |                 |                | 17                             |
|              |            |                 |                 |                |                                |

## CompuCnem Receiving Log

| ent: Ch   | rysle         | r LBG                | Rece     | ived on :    | 10-1     | 1-98 #   | of COC        | 's <u>5</u>                                   | PPS(F         | RFA #) 25   | 54           |       | _ Pa                 | age _         | <u></u> ,  | of <u>∠</u> } |               |
|-----------|---------------|----------------------|----------|--------------|----------|----------|---------------|---|---------------|-------------|--------------|-------|----------------------|---------------|--|---------------|---------------|
| der #     | 339           | 07_ '                | Deliv    | ered by :    | FEI      | ) - ex   |               |   | Lab Ins       | tructions:  |              |       |                      |               |  |               |               |
| oject : K | FH 3          | 7254                 |          |              |          | rious C  |               |   |               | TCC         | _ Ve         | OC    | <u>s_</u>            |               |  | <u>ω</u>      | _ \           |
| uote# 0   | 8             | 1080                 |          | ontract Y    |          |          |               |   |               |             |              |       |                      |               |  | <del></del>   | _             |
| count #   | 501           | 12                   | 1        |              | -        | Hardco   | ру <u> 10</u> | day   |               |             |              |       |                      |               |  |               | _             |
| SDG       | REQ           | SAMPLE ID            | (        | CCN          |          | DUNT /   | PARA          | METER   | ANALY         | SIS CODE    | LIN          | . —   |                      | PLE<br>TE     | NX.  | 1             | 4             |
| 25401     | 1             | 5101498-16B          | 914      | 1726         |          | m VOA    |               | *   | · · · · · · · | 56          | _ <u>-:-</u> |       |                      | $\overline{}$ | WA   | $-\pi$        | A             |
| 123101    | Z             | MWC-1                | 11       | 729          | -10      | ATTI VOE | 100           | 1   | 1 1           | <u> </u>    | 1            |       | <del>۱۱۲۰</del><br>ا | 4.1.18        |  | 7             |               |
|           | 3             | MWB-1                |          | 738          | ·        |          | <del></del>   | <del> </del>                                  | 11            |             |              |       |                      |               |  |               |               |
|           | 4             | PZ-22T               |          | 731          |          |          | <del></del>   | 1   |               |             |              |       |                      |               |  |               |               |
| +         | 5             | PZ-22I<br>MWB-4*     | 1        | 732          | ,        |          |               |   |               |             |              | 1     |                      |               | $\prod$  |               |               |
|           | 6             | PZ-217               |          | 733          |          |          |               |   |               |             |              |       |                      |               |  |               |               |
|           | 17            | MW-195               |          | 734          |          |          |               |   |               |             |              |       |                      |               |  |               |               |
|           | 18            | MW PZ-19]            |          | 735          |          |          |               |   |               |             |              |       |                      |               | $\coprod$  |               |               |
|           | 9             | PZ -20D >            |          | 736          |          |          |               |   |               |             |              |       |                      |               | $\coprod$  |               |               |
|           | 10            | MW -18S              |          | 737          |          |          |               |   |               |             |              |       |                      |               |  | Ш             |               |
|           | 111           | MWB-2 X              | <u>t</u> | 738          |          |          |               |   |               |             |              |       |                      |               | $\coprod$  |               |               |
| 2         | 112           | MWC-2                |          | 739          |          |          |               |   |               |             |              |       |                      |               | $\coprod$  |               |               |
| 3         | 13            | MW-75                |          | 740          |          |          |               |   |               |             |              |       |                      |               | 1  |               |               |
| 4         | 114           | PZ-71                |          | 741          |          |          |               |   |               |             |              |       |                      |               | $\bot\!\!\!\!\!\bot$   | $\perp$       | <u> </u>      |
| 5         | 15            | MWB-5                |          | 742          |          |          |               |   |               |             |              |       |                      |               | $\bot\!$ | $\bot$        | <u> </u>      |
| 6         | 16            |                      |          | 743          |          |          |               |   |               |             |              |       | <u> </u>             |               | 1  | $\bot$        | <u> </u>      |
| 7         | 17            | MWA-6                |          | 744          |          |          |               |   |               |             |              | 1_    |                      |               | 4  | $\bot$        | <del> </del>  |
| 8         | 118           | P2-13I               |          | 74%          |          |          |               |   |               |             |              |       |                      |               | $\perp \parallel$  | $\bot$        | <u> </u>      |
| 9         | 19            | MWA-6D               |          | 746          |          | V        |               |   |               |             |              | 1,    | $\perp$              |               | _}}  | $\perp$       | <del> </del>  |
| :02540    | 2 2           | ) TBLK10149          | 8(48)    | 1, 74        | 7/2-1    | OMI VOF  |               | <u>/.                                    </u> |               | 1           |              | V     |                      | V             | $\perp \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \!$               |               | <del>//</del> |
| ogged In  | By : <u>[</u> | Nelissas             | 2)01     | <del>~</del> | <u> </u> | _        |               | r Entered                                     | ву∑           | relissa     |              | uti   | ي                    |               | <b>&gt;</b>  |               | ٧             |
| Cyanide s | sample        | s checked for sulfic | le and   | l chlorine   | Y/NA     |          | Rece          | ived in go                                    | od cond       | dition YYN. |              |       |                      |               |  |               | •             |
|           |               | : Counter / Page _   |          |              |          |          | /             |   |               | •           | Te           | emper | atur                 | e(s) _        | 4  | _°C           |               |

## CompuChem Receiving Log.

|           |                        | <del></del>        |             |                |                    |       |               |  |
|-----------|------------------------|--------------------|-------------|----------------|--------------------|-------|---------------|--|
| ient: Ch  | upler                  | Received or        | 10/11/98    | # of COC's     | PPS / RFA #        |       | Page <u> </u> | 2.  of  3  |
| der# 3    | 3900                   | _ Delivered by     | Foderal Exp | was .          | Lab Instructions : | MX    |               |  |
| oject/    | CFA 254                | Freight #          |             | er I           |                    | KO    |               | 5  |
| uote #9   | 8-7080                 | Subcontract        |             | 0              | 129                | / \   |               |  |
| count #   | 501112                 | TAT : Verba        | Hardo       | opy 10 day     | 2                  |       |               |  |
|           |                        |                    | AMOUNT /    |                |                    | LINE  | SAMPLE        |  |
| SDG       | REQ SAMPLE ID          | CCN                | CONTAINER   | PARAMETER      | ANALYSIS CODE      |       |               | ex en  |
| 25402     |                        | 914750             | 3-60m/N     | TCL VOA        | 1356               |       | 1014 981      | NAI NIA  |
|           | 22 PZ-12D              | 1914751            |             | 1              | 1                  |       |               | 111  |
|           | 23 MW-15               | s   752            | 2-60M/V     |                |                    |       |               |  |
|           | 24 4 E101498           | -2 1753            | 1           |                |                    |       |               |  |
| 25403     | 15/18/PZ-15I           |                    | 3           |                |                    |       |               |  |
| 25402     | DO25 IMW-115           | > 1914754          |             |                |                    |       |               |  |
|           | 2726 MW-11S            | DUP 1 750          | <del></del> |                |                    |       |               |  |
|           | 0827 MWB-3             | 75                 |             |                |                    |       |               |  |
|           | 0928 MWC-3             |                    |             |                |                    |       |               |  |
| 0 2540/   | 13039 MWA-             |                    |             |                |                    |       |               |  |
| 1 25402   | -312-14I               | 75                 | <del></del> |                |                    |       |               |  |
| 2         | 1301 MWA-2             |                    | <del></del> |                |                    |       |               | <del>                                     </del> |
| 3         | 3B2PZ-165              |                    |             | 4              |                    |       | 1-1-          | <del>-                                    </del> |
| 4         |                        | 0 76               |             |                |                    |       | 10/5/98       | <del></del>                                      |
| 5         | 35 1 MW -85            |                    |             |                |                    |       |               | <del>                                     </del> |
| 6         | 36315101598            |                    |             |                |                    |       |               | 1-1-1-   |
| 7         | 372 PZ-8I              |                    |             |                |                    |       |               | <del>                                     </del> |
| 8         | 3837 P Z -8[           | 7(0                |             |                |                    |       |               | 1-11-  |
| 19        | 39×PZ-9D               | 7(0                |             |                |                    |       |               | <del>                                     </del> |
| 20 ,      | 14031 MW-10            | 15.1176            | 81 V        | <u> </u>       | <u> </u>           | V     |               | 1 1/1  |
| _ogged In | By Melina              | Str                |             | Order Entered  | By Melin           | a St  |               |  |
| Cyanide s | samples checked for s  | ulfide and chlorir | ne Y / NA   | Received in go | ood condition Y N  |       |               | <del></del>                                      |
| •         | lank(s) : Counter / Pa |                    | CCN's       | 1              |                    | Tempo | erature(s)    | 4 °c   |

| Vompav | псш | INCUCIV | HIY LUC |
|--------|-----|---------|---------|
|        |     |         |         |

| Client :  | male         | L                    | Received on :                               |          |             | # of CC  | )C's          | PPS/I   | RFA#                    |              | Page _   | 3                       | of_      | 3             |
|-----------|--------------|----------------------|---|----------|-------------|--|---------------|---------|-------------------------|--------------|--|-------------------------|----------|---------------|
| Order #   |              |                      | Delivered by                                |          |             | <u>/</u>   |               | Lab Ins | structions :            | 11           |  |                         |          |               |
| Project : |              | Q X                  | Freight #                                   |          | 200         |  |               |         | Q                       | $\chi$       |  |                         | 20       |               |
| Quote#    |              |                      | Freight #<br>Subcontract \<br>TAT : Verbal_ | ( / N    | W (         | )  |               |         | 609 V                   | ()           |  |                         |          |               |
| Account # |              | · .                  | TAT : Verbal_                               |          | Hardco      | ру   |               | ļ       | 7                       |              |  |                         |          |               |
| SDG       | REQ          | SAMPLE ID            | CCN   |          | OUNT /      | PAF  | RAMETER       | ANAL    | SIS CODE                | LINE         | SAMPLE<br>DATE                                   |                         |          | la.           |
| 1 25402   | <del>+</del> | PZ-10I               | 914769                                      |          | om V        |  | - VOA         |         | 56                      | 1            | 16 15/98   |                         | N        | A             |
| 2 25403   | 484          | PZ-17D               | 914770                                      |          |             |  |               |         |                         |              |  |                         |          | 1             |
| 3         |              | 2P7-17I              | 914773                                      |          |             |  |               |         |                         |              |  |                         |          |               |
| 4         | 4414         | MWA-1                | 914774                                      |          |             |  |               |         |                         |              |  | $\coprod$               | _        |               |
| 5         | 1454         | tMWA-4               | 1914175                                     |          |             |  |               |         |                         |              |  | $\downarrow \downarrow$ |          |               |
| 6         | 464          | SPARGIE HZC          | 1914776                                     |          | 1.          | <u> </u>   |               |         |                         |              | <del>                                     </del> | $\downarrow \downarrow$ |          | <b></b>       |
| 7 .       | 47.          | MW-203               | 914777                                      | 3-       | 60ml v      | ļ  | <i>\\</i> -   |         | ,                       |              | 10/14/95   | 4-4                     | 1        | <del>  </del> |
| 8         | 7) (1)       | 7                    |   |          |             | <del>                                     </del> |               |         |                         | V            |  |                         |          | <del>V.</del> |
| 9         |              |                      | <del> </del>                                |          |             | <del> </del>                                     |               |         |                         |              | <del> </del>                                     | _                       | #        |               |
| 10        |              |                      | <del></del>                                 | <b></b>  |             | ļ  |               |         |                         |              | +  | ┼                       | $\vdash$ |               |
| 11        |              |                      | <del></del>                                 |          |             | 1  |               |         |                         |              |  | ┼                       | ╁        |               |
| 12        |              |                      | <del></del>                                 | <b></b>  | <del></del> | +.\  | <del>al</del> |         |                         | ļ            |  | +-                      | +        |               |
| 13        | $\bot$       |                      | <del></del>                                 | ┼        | <del></del> | 41/2)  | 1             | _}      |                         | <del> </del> |  | +-                      | +        |               |
| 14        |              |                      |   | 1000     | = 101       | / NA   | 1             |         |                         | <del> </del> | <del></del>                                      | <del></del>             | +        |               |
| 15        |              | <del> </del>         |   | M.       |             | <del></del>                                      |               |         |                         | <u> </u>     |  | +                       | 十        |               |
| 16        |              | <del> </del>         | +   | +-       | <del></del> | -  | <del></del>   | -       |                         |              |  |                         | +        |               |
| 17        |              |                      |   |          |             | +  | <del></del>   | +       | . <u>.</u>              | <del> </del> |  | +-                      | +        | <del></del> - |
| 18        |              |                      | <del></del>                                 | +        | <del></del> |  |               |         |                         | +            |  | +                       | +        |               |
| 19        |              |                      |   |          |             |  |               |         |                         | +            |  | 1                       | 1        |               |
| 20        |              |                      | <u></u>                                     | L        | <del></del> |  |               |         | 12 11.                  |              | <del></del>                                      |                         |          |               |
|           |              | V/slippa =           |   | <u> </u> | _           |  |               |         | NElia                   | 25           | -de  | _                       | _        | _             |
| Cyanide s | ample        | s checked for sulfic | e and chlorine                              | Y/NA     | 4           |  | ceived in go  |         | dition Y/N <sub>-</sub> |              |  | <u> </u>                |          | -             |
| Holding B | lank(s)      | : Counter / Page _   | /   | C        | CN's        |  | _/            |         | ·                       | Tempe        | rature(s) _                                      | 4                       | _°C      |               |

SAMPLE NO.

E101498-1

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914726

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014726A54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_ Date Analyzed: 10/21/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: UG/L CAS NO. COMPOUND DL CONC

| CAS NO.          | COMPOUND                                      | DL    | CONC | Q     |
|------------------|---|-------|------|-------|
| 74 02 0          | Dromomothano                                  | 0.5   |      | U     |
|                  | Bromomethane                                  | 0.5   |      | Ü     |
|                  | Chloroethane                                  | 1 0.5 |      | Ü     |
|                  | Methylene Chloride                            | 15    |      | 3 JB  |
|                  | 1,1-Dichloroethene                            | 0.8   |      | U     |
|                  | 1,1-Dichloroethane                            | 0.6   |      | Ü     |
|                  | Chloroform                                    | 0.8   |      | ซื    |
|                  | 1,2-Dichloroethane                            |       |      | 1 -   |
|                  |   | 0.8   |      | U     |
|                  | 1,1,1-Trichloroethane<br>Carbon Tetrachloride | 0.8   |      | U     |
|                  |   | 1 1   |      | Ü     |
|                  | Bromodichloromethane                          | 0.5   |      | Ū     |
|                  | cis-1,3-Dichloropropene                       | 0.5   |      | Ū     |
|                  | Trichloroethene                               | 0.8   |      | ū     |
|                  | Dibromochloromethane                          | 0.5   |      | Ū     |
|                  | 1,1,2-Trichloroethane                         | 0.8   |      | U     |
| 71-43-2          |   | 0.8   |      | U     |
|                  | trans-1,3-Dichloropropene                     | 0.8   | •    | U     |
|                  | Bromoform                                     | 0.5   |      | U     |
|                  | Tetrachloroethene                             | 0.8   |      | U     |
|                  | 1,1,2,2-Tetrachloroethane                     | 0.5   |      | U     |
| 108-88-3         |   | 0.8   |      | U     |
|                  | Chlorobenzene                                 | 0.5   |      | וט    |
|                  | Ethylbenzene                                  | 0.5   |      | ַט    |
| 100-42-5         | Styrene                                       | 0.5   |      | U     |
| 78-87-5 <b>-</b> | 1,2-Dichloropropane                           | 0.8   |      | Ū     |
|                  | Chloromethane                                 | 1     |      | \U    |
|                  | Carbon disulfide                              | 0.5   |      | עו    |
| 67-64-1          |   | 5     | 0.   | 9 J   |
|                  | 4-Methyl-2-pentanone                          | 2     |      | U     |
|                  | 2-hexanone                                    | 2     |      | U     |
|                  | 2-butanone                                    | 3     |      | U     |
|                  | trans-1,2-Dichloroethene                      | 0.8   |      | U     |
|                  | cis-1,2-Dichloroethene                        | 0.5   |      | U     |
| •                |   | • ]   |      |       |
|                  |   |       |      | _ · · |

SAMPLE NO. E101498-1

Date Sampled: 10/14/98 Project: RFA254 Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401 Matrix: (soil/water) WATER Lab Sample ID: 914726 25.0 (g/mL) ML Lab File ID: CN014726A54.D Sample wt/vol: Level: (low/med) LOW Date Received: 10/17/98 % Moisture: not dec. Date Analyzed: 10/21/98 ID: 0.53 (mm) Dilution Factor: 1.0 GC Column:SP624 Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: (uL) CONCENTRATION UNITS: UG/L CAS NO. COMPOUND CONC Q 1330-20-7-----Xylene (total) 0.5 U

#### SAMPLE NO.

### VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-18S

Q

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914737

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014737A54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. Date Analyzed: 10/21/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 33.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: UG/L CAS NO. COMPOUND DL CONC

U 74-83-9-----Bromomethane 16 75-01-4-----Vinvl Chloride 33 U U 75-00-3-----Chloroethane 16 75-09-2-----Methylene Chloride 19 JB 500 75-35-4----1,1-Dichloroethene 25 U 75-34-3----1,1-Dichloroethane 9 16 J 67-66-3-----Chloroform 25 U 107-06-2----1,2-Dichloroethane 25 U 71-55-6----1,1,1-Trichloroethane 25 65 56-23-5-----Carbon Tetrachloride IJ 33 75-27-4----Bromodichloromethane 16 U 10061-01-5----cis-1,3-Dichloropropene 16 U 79-01-6-----Trichloroethene 25 47 124-48-1-----Dibromochloromethane 16 U 79-00-5----1,1,2-Trichloroethane 25 U 71-43-2-----Benzene 25 U 10061-02-6----trans-1,3-Dichloropropene 25 U 75-25-2-----Bromoform 16 U 770 127-18-4----Tetrachloroethene 25 79-34-5----1,1,2,2-Tetrachloroethane 16 U 108-88-3-----Toluene 25 U 108-90-7-----Chlorobenzene U 16 U 100-41-4-----Ethylbenzene 16 U 16 100-42-5----Styrene 78-87-5-----1,2-Dichloropropane 25 U 74-87-3-----Chloromethane U 33 U 75-15-0-----Carbon disulfide 16 23 J 67-64-1-----Acetone 160 108-10-1-----4-Methyl-2-pentanone U 66 U 591-78-6----2-hexanone 66 78-93-3----2-butanone 99 U 156-60-5----trans-1,2-Dichloroethene U 25 72 156-59-2----cis-1, 2-Dichloroethene 16

SAMPLE NO.

MW-18S

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914737

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014737A54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_ Date Analyzed: 10/21/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 33.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_(uL)

CONCENTRATION UNITS: UG/L

CAS NO. COMPOUND DL CONC Q

1330-20-7-----Xylene (total)\_\_\_\_\_\_\_\_\_\_16

MW-19S

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914734

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014734A54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_ Date Analyzed: 10/21/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: UG/L
CAS NO. COMPOUND DL CONC Q

| CARD INC.         | COLE COLE                 | 22          | 001.0 | *      |
|-------------------|---------------------------|-------------|-------|--------|
| 74 93 0           | Bromomethane              | 0.5         |       | U      |
| 74-03-9           | Time Chlorido             | 1           |       | 1      |
| 75-01-4           | Vinyl Chloride            | 1           |       | บ<br>บ |
|                   | Chloroethane              | 0.5         | 2     | l -    |
| 75-09-2           | Methylene Chloride        | 15          | 2     | 1      |
|                   | 1,1-Dichloroethene        | 0.8         |       | U      |
|                   | 1,1-Dichloroethane        | 0.5         |       | U      |
|                   | Chloroform                | 0.8         |       | Ŭ      |
| 107-06-2          | 1,2-Dichloroethane        | 0.8         |       | U      |
| 71-55-6           | 1,1,1-Trichloroethane     | 0.8         | 0.5   | J      |
|                   | Carbon Tetrachloride      | 1           |       | U      |
|                   | Bromodichloromethane      | 0.5         |       | U      |
|                   | cis-1,3-Dichloropropene   | 0.5         |       | U      |
|                   | Trichloroethene           | 0.8         | 1 }   | ·      |
|                   | Dibromochloromethane      | 0.5         | ļ     | U      |
|                   | 1,1,2-Trichloroethane     | 0.8         |       | ט      |
| 71-43-2           |                           | 0.8         |       | U      |
| 10061-02-6        | trans-1,3-Dichloropropene | 0.8         |       | U      |
|                   | Bromoform                 | 0.5         |       | U      |
| 127-18-4          | Tetrachloroethene         | 0.8         |       | U      |
| 79-34-5           | 1,1,2,2-Tetrachloroethane | 0.5         |       | U      |
| 108-88-3 <b>-</b> | Toluene                   | 0.8         |       | U      |
| 108-90-7          | Chlorobenzene             | 0.5         |       | ַ ט    |
| 100-41-4          | Ethylbenzene              | 0.5         |       | U      |
| 100-42-5          |                           | 0.5         |       | ט      |
|                   | 1,2-Dichloropropane       | 0.8         |       | U      |
|                   | Chloromethane             | 1           |       | ט      |
|                   | Carbon disulfide          | 0.5         |       | U      |
| 67-64-1           |                           | 5           | 1     | J      |
|                   | 4-Methyl-2-pentanone      | 2           |       | U      |
|                   | 2-hexanone                | 2           |       | ע      |
|                   | 2-butanone                | 3           | i     | ŭ l    |
|                   | trans-1,2-Dichloroethene  | 0.8         |       | U      |
|                   | cis-1,2-Dichloroethene    | 0.5         |       | ti l   |
| 100 00 2          | orb 1,2 bronzorocchene    | 5.5         |       | `      |
|                   |                           | <del></del> |       | !      |

MW-19S

SAMPLE NO.

Project: RFA254 Date Sampled: 10/14/98 Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401 Matrix: (soil/water) WATER Lab Sample ID: 914734 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014734A54.D Level: (low/med) LOW Date Received: 10/17/98 % Moisture: not dec. Date Analyzed: 10/21/98 ID: 0.53 (mm) Dilution Factor: 1.0 GC Column:SP624 Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL) CONCENTRATION UNITS: UG/L COMPOUND CAS NO. CONC 1330-20-7-----Xylene (total)\_\_\_ 0.5 U

MW-7S

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914740

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014740A54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 10/21/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 2.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: UG/L
CAS NO. COMPOUND DL CONC

MW-7S

SAMPLE NO.

| Project: RFA254            |              | Date Sampled:       | 10/14/98            |    |
|----------------------------|--------------|---------------------|---------------------|----|
| Lab Code: COMPU Case No.:  | 33902 SAS No | .: SDG              | No.: 25401          |    |
| Matrix: (soil/water) WATER |              | Lab Sample ID:      | 914740              |    |
| Sample wt/vol: 25.0 (g/m   | mL) ML       | Lab File ID:        | CN014740A54.D       | 1  |
| Level: (low/med) LOW       |              | Date Received:      | 10/17/98            |    |
| % Moisture: not dec.       |              | Date Analyzed:      | 10/21/98            |    |
| GC Column:SP624 ID: 0.53   | (mm)         | Dilution Factor     | r: 2.0              |    |
| Soil Extract Volume:(u)    | L)           | Soil Aliquot Vo     | olume:(u            | L) |
| CAS NO. COMPOUNI           | D            | CONCENTRATION<br>DL | UNITS: UG/L<br>CONC | Q  |
| 1330-20-7Xylene (total     | 1)           | 1                   |                     | U  |

MWA-3

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914758

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CR014758B54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_ Date Analyzed: 10/23/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 90.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CAS NO. COMPOUND CONCENTRATION UNITS: UG/L
CAS NO. COMPOUND DL CONC

| CAS NO.    | COMPOUND                  | DL      | CONC | Q   |
|------------|---------------------------|---------|------|-----|
| 74 92 9    | Bromomethane              | 45      |      | U   |
|            | Vinyl Chloride            | 90      |      | Ü   |
|            | Chloroethane              | -<br>45 |      | Ü   |
|            | Methylene Chloride        | 1400    | 110  | 1 - |
|            | 1,1-Dichloroethene        | - 68    | 190  |     |
|            | 1,1-Dichloroethane        | - 45    | 89   |     |
|            | Chloroform                | - 68    | }    | U   |
|            | 1,2-Dichloroethane        | - 68    |      | Ū   |
|            | 1,1,1-Trichloroethane     | 68      | 1700 | 1   |
|            | Carbon Tetrachloride      | 90      |      | U   |
|            | Bromodichloromethane      | 45      |      | Ū   |
|            | cis-1,3-Dichloropropene   | 45      | ·    | Ū   |
|            | Trichloroethene           | 68      | 180  |     |
|            | Dibromochloromethane      | 45      | _,,  | U   |
|            | 1,1,2-Trichloroethane     | 68      | }    | U   |
| 71-43-2    |                           | 68      |      | ប   |
| 10061-02-6 | trans-1,3-Dichloropropene | 68      |      | U   |
|            | Bromoform                 | 45      | ,    | U   |
| 127-18-4   | Tetrachloroethene         | 68      | 610  |     |
| 79-34-5    | 1,1,2,2-Tetrachloroethane | 45      |      | Ŭ   |
| 108-88-3   | Toluene                   | 68      |      | U   |
|            | Chlorobenzene             | 45      |      | U   |
|            | Ethylbenzene              | 45      |      | U   |
| 100-42-5   | Styrene                   | 45      |      | U   |
|            | 1,2-Dichloropropane       | 68      |      | U   |
|            | Chloromethane             | 90      | •    | U   |
|            | Carbon disulfide          | 45      |      | U   |
| 67-64-1    |                           | 450     | 150  | JB  |
|            | 4-Methyl-2-pentanone      | 180     |      | U   |
|            | 2-hexanone                | 180     |      | U   |
|            | 2-butanone                | 270     |      | ט   |
|            | trans-1,2-Dichloroethene  | 68      |      | ט   |
| 156-59-2   | cis-1,2-Dichloroethene    | 45      | 170  |     |
|            |                           |         |      |     |

SAMPLE NO.

MWA-3

Project: RFA254 Date Sampled: 10/14/98 Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401 Matrix: (soil/water) WATER Lab Sample ID: 914758 Lab File ID: CR014758B54.D Sample wt/vol: 25.0 (g/mL) MLLevel: (low/med) LOW Date Received: 10/17/98 % Moisture: not dec. Date Analyzed: 10/23/98 GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 90.0 Soil Extract Volume: \_\_\_ (uL) Soil Aliquot Volume: (uL) CONCENTRATION UNITS: UG/L

CAS NO. COMPOUND CONCENTRATION UNITS: UG/L DL CONC Q

1330-20-7-----Xylene (total) U

MWA-3MS

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914727

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014727B54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 10/23/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 90.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: UG/L
CAS NO. COMPOUND DL CONC Q

| CAS NO.  | COMPOUND                  | בוע         | CONC | ×        |
|----------|---------------------------|-------------|------|----------|
| 74 02 0  | Bromomethane              | 45          | 400  |          |
|          | Vinyl Chloride            | 90          | 380  | ļ        |
|          | Chloroethane              | 45          | 410  | Į        |
|          |                           | 1           | 440  |          |
|          | Methylene Chloride        | 1400        | 590  | OD       |
|          | 1,1-Dichloroethene        | 68          | 470  | }        |
|          | 1,1-Dichloroethane        | 45          |      |          |
|          | Chloroform                | 68          | 400  | İ        |
|          | 1,2-Dichloroethane        | 68          | 420  | 1        |
|          | 1,1,1-Trichloroethane     | 68          | 1900 | ł        |
|          | Carbon Tetrachloride      | 90          | 430  | }        |
|          | Bromodichloromethane      | 45          | 420  | }        |
|          | cis-1,3-Dichloropropene   | 45          | 400  | <b> </b> |
|          | Trichloroethene           | 68          | 630  |          |
|          | Dibromochloromethane      | 45          | 420  |          |
|          | 1,1,2-Trichloroethane     | 68          | 430  |          |
| 71-43-2  |                           | 68          | 420  | }        |
|          | trans-1,3-Dichloropropene | 68          | 420  |          |
|          | Bromoform                 | 45          | 410  |          |
|          | Tetrachloroethene         | 68          | 1000 |          |
|          | 1,1,2,2-Tetrachloroethane | 45          | 430  |          |
| 108-88-3 |                           | · 68        | 430  |          |
|          | Chlorobenzene             | 45          | 450  |          |
| 100-41-4 | Ethylbenzene              | 45          | 440  |          |
| 100-42-5 |                           | 45          | 420  |          |
| 78-87-5  | 1,2-Dichloropropane       | 68          | 430  |          |
| 74-87-3  | Chloromethane             | 90          | 410  | 1        |
| 75-15-0  | Carbon disulfide          | 45          | 430  |          |
| 67-64-1  | Acetone                   | 450         | 2500 | В        |
| 108-10-1 | 4-Methyl-2-pentanone      | 180         | 2400 |          |
|          | 2-hexanone                | 180         | 2400 |          |
|          | 2-butanone                | 270         | 2300 |          |
|          | trans-1,2-Dichloroethene  | 68          | 420  |          |
|          | cis-1,2-Dichloroethene    | 45          | 570  |          |
|          |                           |             |      |          |
|          | <del></del> \             | \ <u></u> \ |      |          |

1330-20-7-----Xylene (total)\_\_\_\_

SAMPLE NO.

1500

MWA-3MS

45

Project: RFA254 Date Sampled: 10/14/98 Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401 Matrix: (soil/water) WATER Lab Sample ID: 914727 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014727B54.D Level: (low/med) LOW Date Received: 10/17/98 % Moisture: not dec. Date Analyzed: 10/23/98 GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 90.0 Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: (uL) CONCENTRATION UNITS: UG/L CAS NO. COMPOUND CONC Q

MWA-3MSD

SAMPLE NO.

Q

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914728

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014728B54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 10/23/98

GC Column: SP624 ID: 0.53 (mm) Dilution Factor: 90.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: UG/L
CAS NO. COMPOUND DL CONC

| CAS NO.          | COMPOUND                  | נוע  | CONC  | V |
|------------------|---------------------------|------|-------|---|
| 74-83-9          | Bromomethane              | 45   | 420   |   |
|                  | Vinyl Chloride            | 90   | 420   |   |
|                  | Chloroethane              | 45   | 420   | 1 |
|                  | Methylene Chloride        | 1400 | 480   | • |
|                  | 1,1-Dichloroethene        | 68   | 590   |   |
|                  | 1,1-Dichloroethane        | 45   | 500   | } |
|                  | Chloroform                | 68   | 410   | Ì |
|                  | 1,2-Dichloroethane        | 68   | 450   |   |
|                  | 1,1,1-Trichloroethane     | 68   | 2000  |   |
|                  | Carbon Tetrachloride      | 90   | 440   |   |
|                  | Bromodichloromethane      | 45   | 440   |   |
|                  | cis-1,3-Dichloropropene   | 45   | 430   | [ |
|                  | Trichloroethene           | 68   | 630   | 1 |
| 124-48-1         | Dibromochloromethane      | 45   | 450   |   |
| 79-00-5          | 1,1,2-Trichloroethane     | 68   | 460   | ļ |
| 71-43-2          |                           | 68   | 440   |   |
| 10061-02-6       | trans-1,3-Dichloropropene | 68   | . 500 | 1 |
| 75-25-2 <b>-</b> | Bromoform                 | 45   | 450   | ĺ |
| 127-18-4         | Tetrachloroethene         | 68   | 1000  |   |
| 79-34-5          | 1,1,2,2-Tetrachloroethane | 45   | 460   | ļ |
| 108-88-3         |                           | 68   | 440   | ) |
|                  | Chlorobenzene             | 45   | 470   |   |
|                  | Ethylbenzene              | 45   | 440   | \ |
| 100-42-5         |                           | 45   | 430   |   |
|                  | 1,2-Dichloropropane       | 68   | 440   |   |
|                  | Chloromethane             | 90   | 420   | } |
|                  | Carbon disulfide          | 45   | 420   |   |
| 67-64-1          |                           | 450  | 2800  | В |
|                  | 4-Methyl-2-pentanone      | 180  | 3000  |   |
|                  | 2-hexanone                | 180  | 3000  |   |
|                  | 2-butanone                | 270  | 2700  | ĺ |
|                  | trans-1,2-Dichloroethene  | 68   | , 420 |   |
| 156-59-2         | cis-1,2-Dichloroethene    | 45   | 590   |   |
|                  |                           |      |       |   |
|                  |                           |      |       |   |

SAMPLE NO.

MWA-3MSD

Date Sampled: 10/14/98 Project: RFA254 Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401 Matrix: (soil/water) WATER Lab Sample ID: 914728 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014728B54.D Level: (low/med) LOW Date Received: 10/17/98 % Moisture: not dec. Date Analyzed: 10/23/98 GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 90.0 Soil Aliquot Volume: (uL) Soil Extract Volume: \_\_\_\_(uL) CONCENTRATION UNITS: UG/L COMPOUND CAS NO. Q 1330-20-7-----Xylene (total) 45 1400

|--|

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914743

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014743A54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 10/21/98

GC Column: SP624 ID: 0.53 (mm) Dilution Factor: 100.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CAS NO. COMPOUND CONCENTRATION UNITS: UG/L
CAS NO. COMPOUND DL CONC

| WID 110.   | 00112 00112               |      |      | -  |
|------------|---------------------------|------|------|----|
| : 74 02 0  | Bromomethane              | 50   |      | U  |
|            | Vinyl Chloride            | 100  | }    | Ü  |
|            | Chloroethane              | 50   |      | U  |
|            |                           | 1    | C1   | JВ |
| 75-09-2    | Methylene Chloride        | 1500 | 180  | 1  |
| 75-35-4    | 1,1-Dichloroethene        | 75   |      | 1  |
|            | 1,1-Dichloroethane        | 50   | 120  | 1  |
|            | Chloroform                | 75   | }    | Ü  |
|            | 1,2-Dichloroethane        | 75   | 2700 | U  |
| 71-55-6    | 1,1,1-Trichloroethane     | 75   | 2100 | ,  |
|            | Carbon Tetrachloride      | 100  |      | U  |
|            | Bromodichloromethane      | 50   |      | U  |
|            | cis-1,3-Dichloropropene   | 50   |      | U  |
|            | Trichloroethene           | 75   | 1600 | Ì  |
|            | Dibromochloromethane      | 50   |      | U  |
| 79-00-5    | 1,1,2-Trichloroethane     | 75   |      | U  |
| 71-43-2    | Benzene                   | 75   |      | U  |
| 10061-02-6 | trans-1,3-Dichloropropene | 75   |      | U  |
| 75-25-2    | Bromoform                 | 50   |      | U  |
| 127-18-4   | Tetrachloroethene         | 75   | 180  | }  |
| 79-34-5    | 1,1,2,2-Tetrachloroethane | 50   |      | U  |
| 108-88-3   | Toluene                   | 75   |      | U  |
| 108-90-7   | Chlorobenzene             | 50   |      | U  |
|            | Ethylbenzene              | 50   |      | U  |
| 100-42-5   |                           | 50   |      | U  |
|            | 1,2-Dichloropropane       | 75   |      | U  |
|            | Chloromethane             | 100  | i    | Ū  |
|            | Carbon disulfide          | 50   | •    | Ū  |
| 67-64-1    |                           | 500  |      | บ  |
|            | 4-Methy1-2-pentanone      | 200  |      | Ū  |
|            | 2-hexanone                | 200  |      | Ū  |
|            | 2-butanone                | 300  |      | Ū  |
|            | trans-1,2-Dichloroethene  | 75   |      | IJ |
|            | cis-1,2-Dichloroethene    | 50 i | 77   | J  |
| 130-33-2   | CIB 1,2 Dicitoloccilette  | 50   | , ,  |    |
|            |                           |      |      |    |

MWA-5

SAMPLE NO.

| Project: RFA254                         | Date Sampled: 10/14/98              |
|---|-------------------------------------|
| Lab Code: COMPU Case No.: 33902 SAS No. | : SDG No.: 25401                    |
| Matrix: (soil/water) WATER              | Lab Sample ID: 914743               |
| Sample wt/vol: 25.0 (g/mL) ML           | Lab File ID: CN014743A54.D          |
| Level: (low/med) LOW                    | Date Received: 10/17/98             |
| % Moisture: not dec.                    | Date Analyzed: 10/21/98             |
| GC Column:SP624 ID: 0.53 (mm)           | Dilution Factor: 100.0              |
| Soil Extract Volume:(uL)                | Soil Aliquot Volume:(uL)            |
| CAS NO. COMPOUND                        | CONCENTRATION UNITS: UG/L DL CONC Q |
| 1330-20-7Xylene (total)                 | U                                   |

MWA-6

Q

CONCENTRATION UNITS: UG/L

12

SAMPLE NO.

Date Sampled: 10/14/98 Project: RFA254

SDG No.: 25401 Lab Code: COMPU Case No.: 33902 SAS No.:

Lab Sample ID: 914744 Matrix: (soil/water) WATER

Sample wt/vol: 25.0 (g/mL) MLLab File ID: CN014744B54.D

Level: (low/med) Date Received: 10/17/98 LOW

% Moisture: not dec. Date Analyzed: 10/22/98

Dilution Factor: 25.0 GC Column:SP624 ID: 0.53 (mm)

COMPOUND

CAS NO.

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: (uL)

U 74-83-9-----Bromomethane 12 25 75-01-4-----Vinyl Chloride U 75-00-3-----Chloroethane U 12 75-09-2-----Methylene Chloride 380 22 JB 75-35-4-----1,1-Dichloroethene 19 28 75-34-3-----1,1-Dichloroethane 8 [J 12 67-66-3-----Chloroform 19 U 107-06-2----1, 2-Dichloroethane 19 U 71-55-6-----1,1,1-Trichloroethane 19 240 56-23-5-----Carbon Tetrachloride 25 U 75-27-4----Bromodichloromethane 12 U 10061-01-5----cis-1,3-Dichloropropene U 12 79-01-6-----Trichloroethene 2000 E 19 124-48-1-----Dibromochloromethane 12 U 79-00-5----1,1,2-Trichloroethane U 19 71-43-2----Benzene U 19 10061-02-6----trans-1,3-Dichloropropene 19 U 75-25-2----Bromoform 12 U 127-18-4-----Tetrachloroethene 19 U 79-34-5----1,1,2,2-Tetrachloroethane 12 U 108-88-3-----Toluene 19 U 108-90-7-----Chlorobenzene 12 U 100-41-4-----Ethylbenzene 12 U 100-42-5-----Styrene U 12 78-87-5-----1,2-Dichloropropane U 19 74-87-3-----Chloromethane 25 U 75-15-0------Carbon disulfide 12 U 67-64-1------Acetone 120 68 JB 108-10-1----4-Methyl-2-pentanone 50 U 591-78-6----2-hexanone 50 U 78-93-3----2-butanone 75 U 156-60-5-----trans-1,2-Dichloroethene 19 U

156-59-2----cis-1,2-Dichloroethene

97

1330-20-7-----Xylene (total)

MWA-6

12

SAMPLE NO.

U

Date Sampled: 10/14/98 Project: RFA254 Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401 Matrix: (soil/water) WATER Lab Sample ID: 914744 Lab File ID: CN014744B54.D Sample wt/vol: 25.0 (g/mL) MLLevel: (low/med) LOW Date Received: 10/17/98 % Moisture: not dec. Date Analyzed: 10/22/98 GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 25.0 Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: (uL) CONCENTRATION UNITS: UG/L CAS NO. COMPOUND CONC Q

FORM I VOA

MWA-6DL

CONCENTRATION UNITS: UG/L

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914744

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CR014744B54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_ Date Analyzed: 10/23/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 100.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

COMPOUND CAS NO. U 74-83-9-----Bromomethane 50 U 75-01-4-----Vinyl Chloride 100 U 75-00-3-----Chloroethane 50 75-09-2----Methylene Chloride 1500 130 DJB 75-35-4----1,1-Dichloroethene 75 U 75-34-3-----1,1-Dichloroethane U 50 67-66-3-----Chloroform 75 U 107-06-2-----1, 2-Dichloroethane 75 U 71-55-6----1,1,1-Trichloroethane 75 230 D 56-23-5-----Carbon Tetrachloride U 100 75-27-4-----Bromodichloromethane U 50 10061-01-5----cis-1,3-Dichloropropene 50 U 75 2200 D 79-01-6-----Trichloroethene 124-48-1-----Dibromochloromethane 50 U 79-00-5-----1,1,2-Trichloroethane 75 Ũ 71-43-2----Benzene 75 Ũ 10061-02-6----trans-1,3-Dichloropropene U 75 75-25-2----Bromoform 50 U 127-18-4-----Tetrachloroethene 75 U 79-34-5----1,1,2,2-Tetrachloroethane 50 U 108-88-3----Toluene 75 U U 108-90-7-----Chlorobenzene 50 100-41-4-----Ethylbenzene 50 U U 100-42-5-----Styrene 50 78-87-5----1,2-Dichloropropane U 75 74-87-3-----Chloromethane 100 Ū 75-15-0-----Carbon disulfide 50 Ũ 67-64-1-----Acetone 500 150 DJB 108-10-1----4-Methyl-2-pentanone 200 U 591-78-6----2-hexanone 200 U 78-93-3----2-butanone U 300 156-60-5----trans-1,2-Dichloroethene 75 U 156-59-2----cis-1,2-Dichloroethene 50 89 D

SAMPLE NO.

MWA-6DL

50

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914744

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CR014744B54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. Date Analyzed: 10/23/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 100.0

1330-20-7-----Xylene (total)

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: UG/L

CAS NO. COMPOUND DL CONC Q

FORM I VOA

U

MWA-6DUP

Q

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914746

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014746B54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. Date Analyzed: 10/22/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 100.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: UG/L CAS NO. COMPOUND DL CONC

| CAB NO.  | COMPOUND                  | 2    | 20210 | *   |
|----------|---------------------------|------|-------|-----|
| 74 92 9- | Bromomethane              | 50   |       | U   |
|          | Vinyl Chloride            | 100  |       | Ü   |
|          | Chloroethane              | 50   |       | U   |
|          | Methylene Chloride        | 1500 | 120   | 1 - |
| 75-09-2  | 1,1-Dichloroethene        | 75   | . 120 | บ็  |
|          | 1,1-Dichloroethane        | 50   |       | 1   |
| /5-34-3  | Chloroform                | 1    | •     | U   |
|          |                           | 75   |       | U   |
|          | 1,2-Dichloroethane        | 75   | 220   | Ū   |
|          | 1,1,1-Trichloroethane     | 75   | 230   | 1   |
|          | Carbon Tetrachloride      | 100  |       | Ū   |
|          | Bromodichloromethane      | 50   |       | U   |
|          | cis-1,3-Dichloropropene   | 50   |       | עׁן |
|          | Trichloroethene           | 75   | 2100  | I.  |
|          | Dibromochloromethane      | 50   |       | U   |
|          | 1,1,2-Trichloroethane     | 75   |       | U   |
| 71-43-2  |                           | 75   |       | ט   |
|          | trans-1,3-Dichloropropene | 75   |       | U   |
| 75-25-2  |                           | 50   |       | U   |
| 127-18-4 | Tetrachloroethene         | 75   |       | U   |
| 79-34-5  | 1,1,2,2-Tetrachloroethane | 50   | I     | U   |
| 108-88-3 | Toluene                   | 75   | •     | U   |
| 108-90-7 | Chlorobenzene             | 50   |       | Ū   |
| 100-41-4 | Ethylbenzene              | 50   |       | U   |
| 100-42-5 | Styrene                   | 50   |       | U   |
|          | 1,2-Dichloropropane       | 75 ( |       | U   |
|          | Chloromethane             | 100  |       | U   |
|          | Carbon disulfide          | 50   |       | U   |
| 67-64-1  |                           | 500  | 290   | JΒ  |
|          | 4-Methyl-2-pentanone      | 200  |       | Ū   |
|          | 2-hexanone                | 200  | Ì     | Ŭ   |
|          | 2-butanone                | 300  |       | Ŭ   |
|          | trans-1,2-Dichloroethene  | 75   |       | U   |
|          | cis-1,2-Dichloroethene    | 50   | 74    | 0   |
| 100 00 2 |                           | 30   | 74    |     |
|          |                           |      |       |     |

MWA-6DUP

SAMPLE NO.

Date Sampled: 10/14/98 Project: RFA254 Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401 Matrix: (soil/water) WATER Lab Sample ID: 914746 Lab File ID: CN014746B54.D Sample wt/vol: 25.0 (g/mL) ML Level: (low/med) LOW Date Received: 10/17/98 % Moisture: not dec. Date Analyzed: 10/22/98 GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 100.0 Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: (uL) CONCENTRATION UNITS: UG/L CAS NO. COMPOUND Q 1330-20-7-----Xylene (total) 50

CONCENTRATION UNITS: UG/L

### VOLATILE ORGANICS ANALYSIS DATA SHEET

MWB-1

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914730

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014730B54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. Date Analyzed: 10/20/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CAS NO. COMPOUND CONC 0 74-83-9-----Bromomethane 0.5 U U 75-01-4------Vinyl Chloride 1 75-00-3-----Chloroethane 0.5 U 75-09-2-----Methylene Chloride 15 1 JB 75-35-4----1,1-Dichloroethene 0.8 U 75-34-3-----1,1-Dichloroethane 0.5 U 67-66-3-----Chloroform 0.8 U 107-06-2----1,2-Dichloroethane 0.8 U 71-55-6-----1,1,1-Trichloroethane U 0.8 56-23-5-----Carbon Tetrachloride U 1 75-27-4-----Bromodichloromethane 0.5 U 10061-01-5----cis-1,3-Dichloropropene 0.5 U 79-01-6-----Trichloroethene 0.8 U 124-48-1-----Dibromochloromethane 0.5 U 79-00-5-----1,1,2-Trichloroethane U 0.8 U 71-43-2----Benzene 0.8 10061-02-6----trans-1,3-Dichloropropene U 0.8 75-25-2----Bromoform 0.5 U 127-18-4-----Tetrachloroethene U 0.8 79-34-5----1,1,2,2-Tetrachloroethane U 0.5 108-88-3-----Toluene 0.4 0.8 J 108-90-7-----Chlorobenzene U 0.5 100-41-4----Ethylbenzene U 0.5 U 100-42-5-----Styrene 0.5 78-87-5----1,2-Dichloropropane 0.8 U 74-87-3-----Chloromethane IJ 7 75-15-0-----Carbon disulfide 0.5 U 67-64-1-----Acetone 5 180 E 108-10-1-----4-Methyl-2-pentanone 2 1 J 591-78-6----2-hexanone 2 3 78-93-3-----2-butanone 3 156-60-5----trans-1,2-Dichloroethene 0.8 U 156-59-2----cis-1,2-Dichloroethene 0.5 U

MWB-1

SAMPLE NO.

Date Sampled: 10/14/98 Project: RFA254 Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401 Matrix: (soil/water) WATER Lab Sample ID: 914730 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014730B54.D Date Received: 10/17/98 Level: (low/med) LOW % Moisture: not dec. \_\_\_\_\_ Date Analyzed: 10/20/98 GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 1.0 Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: (uL) CONCENTRATION UNITS: UG/L CAS NO. COMPOUND CONC

1330-20-7-----Xylene (total)\_\_\_\_\_\_\_\_\_0.5

MWB-1DL

0

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914730

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CR014730B54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 10/23/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 1.9

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: UG/L CAS NO. COMPOUND DL CONC

74-83-9-----Bromomethane U 1 75-01-4-----Vinyl Chloride 2 U 75-00-3-----Chloroethane U 1 75-09-2-----Methylene Chloride 28 DJB 75-35-4----1,1-Dichloroethene U 1 75-34-3-----1,1-Dichloroethane 1 U 67-66-3-----Chloroform 1 U 107-06-2----1,2-Dichloroethane U 1 71-55-6----1,1,1-Trichloroethane U 2 56-23-5-----Carbon Tetrachloride U 75-27-4----Bromodichloromethane 1 U 10061-01-5----cis-1,3-Dichloropropene 1 U 79-01-6-----Trichloroethene 1 U 124-48-1-----Dibromochloromethane 1 U 79-00-5-----1,1,2-Trichloroethane 1 U 71-43-2----Benzene 1 U 10061-02-6----trans-1,3-Dichloropropene 1 U 75-25-2-----Bromoform 1 U 127-18-4-----Tetrachloroethene 1 U 79-34-5-----1,1,2,2-Tetrachloroethane U 1 108-88-3-----Toluene U 1 108-90-7-----Chlorobenzene U 1 100-41-4-----Ethylbenzene U 1 100-42-5-----Styrene 1 U 78-87-5----1,2-Dichloropropane U 74-87-3-----Chloromethane 2 U 75-15-0-----Carbon disulfide U 1 67-64-1------Acetone 10 180 DB 108-10-1----4-Methyl-2-pentanone 4 U 591-78-6----2-hexanone 4 2 | DJ 78-93-3----2-butanone 6 37 D 156-60-5----trans-1,2-Dichloroethene 1 IJ 156-59-2----cis-1,2-Dichloroethene U

MWB-1DL

SAMPLE NO.

Date Sampled: 10/14/98 Project: RFA254 Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401 Matrix: (soil/water) WATER Lab Sample ID: 914730 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CR014730B54.D Level: (low/med) LOW Date Received: 10/17/98 % Moisture: not dec. \_\_\_\_\_ Date Analyzed: 10/23/98 ID: 0.53 (mm) Dilution Factor: 1.9 GC Column:SP624 Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL) CONCENTRATION UNITS: UG/L CAS NO. COMPOUND 1330-20-7-----Xylene (total)\_\_\_\_\_ 1 U

|       | - 1 |
|-------|-----|
| MWB-2 | ĺ   |
|       | ļ   |

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914738

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014738A54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_ Date Analyzed: 10/21/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: UG/L CAS NO. COMPOUND DL CONC

|          | 33.12 33.12               |      |      | ~   |
|----------|---------------------------|------|------|-----|
| 74 92 9  | Bromomethane              | 0.5  |      | U   |
|          | Vinyl Chloride            | 1    | ľ    | U   |
|          | Chloroethane              | 1 -1 | 1    | U   |
|          |                           | 0.5  | t    | -   |
| 75-09-2  | Methylene Chloride        | 15   |      | JB  |
|          | 1,1-Dichloroethene        | 0.8  |      | U   |
|          | 1,1-Dichloroethane        | 0.5  | · ·  | U   |
|          | Chloroform                | 0.8  |      | U   |
|          | 1,2-Dichloroethane        | 0.8  |      | U   |
|          | 1,1,1-Trichloroethane     | 0.8  |      | U   |
|          | Carbon Tetrachloride      | 1    | r    | U   |
|          | Bromodichloromethane      | 0.5  |      | U   |
|          | cis-1,3-Dichloropropene   | 0.5  | l l  | U   |
|          | Trichloroethene           | 0.8  |      | U   |
|          | Dibromochloromethane      | 0.5  |      | U   |
|          | 1,1,2-Trichloroethane     | 0.8  | 1    | U   |
| 71-43-2  |                           | 0.8  | , [1 | U   |
|          | trans-1,3-Dichloropropene | 0.8  | í í  | U   |
| 75-25-2  | Bromoform                 | 0.5  | }1   | Ū   |
| 127-18-4 | Tetrachloroethene         | 0.8  | 0.4  | J   |
| 79-34-5  | 1,1,2,2-Tetrachloroethane | 0.5  | J [  | U   |
| 108-88-3 | Toluene                   | 0.8  | Įτ   | U   |
| 108-90-7 | Chlorobenzene             | 0.5  | J }  | U   |
| 100-41-4 | Ethylbenzene              | 0.5  | Įτ   | IJ  |
| 100-42-5 | Styrene                   | 0.5  | ) {  | J   |
|          | 1,2-Dichloropropane       | 0.8  | 7    | IJ  |
|          | Chloromethane             | 1    | ĺτ   | IJ  |
|          | Carbon disulfide          | 0.5  |      | J   |
| 67-64-1  |                           | 5    | 1    | J   |
|          | 4-Methyl-2-pentanone      | 2    | Ţ    | J   |
|          | 2-hexanone                | 2    | Į -  | J . |
|          | 2-butanone                | 3    | Į.   | J   |
|          | trans-1,2-Dichloroethene  | 0.8  | ł    | J   |
|          | cis-1,2-Dichloroethene    | 0.5  | t    |     |
| 10 JJ-2  |                           | 0.5  |      | -   |
|          |                           |      |      | !   |

1330-20-7-----Xylene (total)\_\_\_\_

SAMPLE NO.

MWB-2

0.5

Project: RFA254 Date Sampled: 10/14/98 Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401 Matrix: (soil/water) WATER Lab Sample ID: 914738 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014738A54.D Level: (low/med) LOW Date Received: 10/17/98 % Moisture: not dec. Date Analyzed: 10/21/98 GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 1.0 Soil Aliquot Volume: (uL) Soil Extract Volume: \_\_\_\_(uL) CONCENTRATION UNITS: UG/L CAS NO. COMPOUND CONC

U

SAMPLE NO.

MWB-4

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914732

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014732B54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_ Date Analyzed: 10/20/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: UG/L CAS NO. COMPOUND DL CONC

| CAS NO.     | COME GOIND                | ДЦ  | CONC   | ×  |
|-------------|---------------------------|-----|--------|----|
| 74 02 0     | Duamamathana              | 0.5 |        | U  |
|             | Bromomethane              | 0.5 |        | ט  |
|             | Vinyl Chloride            | 1   |        | Ü  |
|             |                           | 0.5 | 1      | 1  |
|             | Methylene Chloride        | 15  | 1      | 1  |
|             | 1,1-Dichloroethene        | 0.8 |        | ū  |
|             | 1,1-Dichloroethane        | 0.5 |        | U  |
|             | Chloroform                | 0:8 |        | ט  |
|             | 1,2-Dichloroethane        | 0.8 |        | ַ  |
|             | 1,1,1-Trichloroethane     | 0.8 |        | U  |
|             | Carbon Tetrachloride      | 1   |        | U  |
|             | Bromodichloromethane      | 0.5 | Į      | U  |
|             | cis-1,3-Dichloropropene   | 0.5 | i<br>I | U  |
| 79-01-6     | Trichloroethene           | 0.8 | 3      | }  |
| 124-48-1    | Dibromochloromethane      | 0.5 | i      | Ū  |
| 79-00-5     | 1,1,2-Trichloroethane     | 0.8 | i      | Ū  |
| 71-43-2     | Benzene                   | 0.8 |        | U  |
| 10061-02-6  | trans-1,3-Dichloropropene | 0.8 |        | U  |
| 75-25-2     | Bromoform                 | 0.5 |        | U  |
| 127-18-4    | Tetrachloroethene         | 0.8 |        | U  |
| 79-34-5     | 1,1,2,2-Tetrachloroethane | 0.5 |        | U  |
| 108-88-3    |                           | 0.8 | I      | U  |
| 108-90-7    | Chlorobenzene             | 0.5 | i      | Ü  |
| 100-41-4    | Ethylbenzene              | 0.5 |        | U  |
| 100-42-5    | Styrene                   | 0.5 |        | บ  |
|             | 1,2-Dichloropropane       | 0.8 |        | U  |
|             | Chloromethane             | 1   |        | U  |
| 75-15-0     | Carbon disulfide          | 0.5 |        | Ū  |
| 67-64-1     |                           | 5   | 2      | Ĵ  |
|             | 4-Methyl-2-pentanone      | 2   | -      | Ū  |
| 591-78-6    |                           | 2   |        | Ŭ  |
| 78-93-3     |                           | 3   |        | U  |
|             | trans-1,2-Dichloroethene  | 0.8 |        | Ū  |
|             | cis-1,2-Dichloroethene    | 0.5 | ·      | IJ |
| 130-39-2    | CID 1,2 DICHIOIOCCHCHE    | 0.5 |        |    |
| <del></del> |                           |     | /      |    |

MWB-4

SAMPLE NO.

Project: RFA254 Date Sampled: 10/14/98 Lab Code: COMPU Case No.: 33902 SDG No.: 25401 SAS No.: Matrix: (soil/water) WATER Lab Sample ID: 914732 Sample wt/vol: 25.0 (g/mL) MLLab File ID: CN014732B54.D Date Received: 10/17/98 Level: (low/med) LOW % Moisture: not dec. Date Analyzed: 10/20/98 ID: 0.53 (mm) Dilution Factor: 1.0 GC Column:SP624 Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: (uL) CONCENTRATION UNITS: UG/L CAS NO. COMPOUND 1330-20-7-----Xylene (total) 0.5 U

MWB-5

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914742

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014742A54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_ Date Analyzed: 10/21/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: UG/L
CAS NO. COMPOUND DL CONC

| CAS NO.    | COMPOUND                  | בוע | CONC | Q   |
|------------|---------------------------|-----|------|-----|
| 74 93 9    | Bromomethane              | 0.5 |      | U   |
|            | Vinyl Chloride            | 1   |      | Ü   |
|            | Chloroethane              | 0.5 |      | Ü   |
|            | Methylene Chloride        | 15  | 1    | 1 - |
|            | 1,1-Dichloroethene        | 0.8 |      | U   |
|            | 1,1-Dichloroethane        |     |      | ט   |
|            |                           | 0.5 |      | 1   |
|            | Chloroform                | 0.8 | •    | U   |
|            | 1,2-Dichloroethane        | 0.8 |      | ភ្  |
|            | 1,1,1-Trichloroethane     | 0.8 | 0.3  | J   |
|            | Carbon Tetrachloride      | 1   | 1    | U   |
|            | Bromodichloromethane      | 0.5 |      | U   |
| 10061-01-5 | cis-1,3-Dichloropropene   | 0.5 | _    | U   |
|            | Trichloroethene           | 0.8 | 6    |     |
|            | Dibromochloromethane      | 0.5 |      | U   |
|            | 1,1,2-Trichloroethane     | 0.8 |      | U   |
| 71-43-2    |                           | 0.8 |      | U   |
|            | trans-1,3-Dichloropropene | 0.8 |      | U   |
|            | Bromoform_                | 0.5 |      | U   |
|            | Tetrachloroethene         | 0.8 | 0.3  | J   |
|            | 1,1,2,2-Tetrachloroethane | 0.5 |      | U   |
| 108-88-3   |                           | 0.8 |      | U   |
|            | Chlorobenzene             | 0.5 |      | U   |
|            | Ethylbenzene              | 0.5 |      | U   |
| 100-42-5   |                           | 0.5 |      | U   |
|            | 1,2-Dichloropropane       | 0.8 |      | U   |
| 74-87-3    | Chloromethane             | 1   |      | U · |
| 75-15-0    | Carbon disulfide          | 0.5 |      | Ŭ   |
| 67-64-1    | Acetone                   | 5   | 1    | J   |
| 108-10-1   | 4-Methyl-2-pentanone      | 2   |      | U   |
|            | 2-hexanone                | 2   |      | U   |
|            | 2-butanone                | 3   |      | Ū   |
|            | trans-1,2-Dichloroethene  | 0.8 | j    | U j |
|            | cis-1,2-Dichloroethene    | 0.5 | 0.6  |     |
| =          |                           |     |      |     |
|            |                           |     |      |     |

SAMPLE NO.

MWB-5

Date Sampled: 10/14/98 Project: RFA254

SDG No.: 25401 Lab Code: COMPU Case No.: 33902 SAS No.:

Matrix: (soil/water) WATER Lab Sample ID: 914742

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014742A54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. Date Analyzed: 10/21/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: UG/L

CAS NO. COMPOUND Q 1330-20-7-----Xylene (total) 0.5

U

MWC-1

Q

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914729

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014729B54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_ Date Analyzed: 10/20/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: UG/L CAS NO. COMPOUND DL CONC

| •        |                           |     |          |    |
|----------|---------------------------|-----|----------|----|
| 74-83-9  | Bromomethane              | 5   |          | U  |
|          | Vinyl Chloride            | 10  |          | Ü  |
|          | Chloroethane              | 5   |          | II |
|          | Methylene Chloride        | 150 | 10       | 1  |
|          | 1,1-Dichloroethene        | 8   |          | บ  |
|          | 1,1-Dichloroethane        | 5   |          | Ü  |
|          | Chloroform                | . 8 |          | Ū  |
|          | 1,2-Dichloroethane        | 8   | 4        |    |
|          | 1,1,1-Trichloroethane     | . 8 | <b>*</b> | บ  |
|          | Carbon Tetrachloride      | 10  |          | Ü  |
|          | Bromodichloromethane      | 5   |          | Ü  |
|          | cis-1,3-Dichloropropene   | 5   |          | Ü  |
|          | Trichloroethene           | 5   |          | Ü  |
|          | Dibromochloromethane      | 8   | 1        | 4  |
|          | 1,1,2-Trichloroethane     | 5   | 4<br>5   | J  |
|          |                           | 8   | 5        | J  |
| 71-43-2  |                           | 8   | ^        | U  |
|          | trans-1,3-Dichloropropene | 8   | 9<br>5   |    |
| 75-25-2  |                           | 5   | 5        |    |
|          | Tetrachloroethene         | 8   | ) 8      | U  |
|          | 1,1,2,2-Tetrachloroethane | . 5 | ) 8      |    |
| 108-88-3 |                           | 8   |          | U  |
|          | Chlorobenzene             | 5   |          | U  |
|          | Ethylbenzene              | 5   |          | Ū  |
| 100-42-5 |                           | 5   |          | ַ  |
|          | 1,2-Dichloropropane       | 8   | .3       | J  |
|          | Chloromethane             | 10  |          | U  |
|          | Carbon disulfide          | 5   |          | U  |
| 67-64-1  |                           | 50  | 740      |    |
|          | 4-Methyl-2-pentanone      | 20  | 39       | }  |
| 591-78-6 |                           | 20  | 37       | į  |
| 78-93-3  |                           | 30  | 42       |    |
|          | trans-1,2-Dichloroethene  | 8   |          | U  |
| 156-59-2 | cis-1,2-Dichloroethene    | 5   |          | U  |
|          |                           |     |          |    |

MWC-1

SAMPLE NO.

| Project: RFA254                 | Date Sampled: 10/14/98              |
|---------------------------------|-------------------------------------|
| Lab Code: COMPU Case No.: 33902 | SAS No.: SDG No.: 25401             |
| Matrix: (soil/water) WATER      | Lab Sample ID: 914729               |
| Sample wt/vol: 25.0 (g/mL) ML   | Lab File ID: CN014729B54.D          |
| Level: (low/med) LOW            | Date Received: 10/17/98             |
| % Moisture: not dec.            | Date Analyzed: 10/20/98             |
| GC Column:SP624 ID: 0.53 (mm)   | Dilution Factor: 10.0               |
| Soil Extract Volume:(uL)        | Soil Aliquot Volume:(uL)            |
| CAS NO. COMPOUND                | CONCENTRATION UNITS: UG/L DL CONC Q |
| 1330-20-7Xylene (total)         | 5 U                                 |

SAMPLE NO.

MWC-2

CONCENTRATION UNITS: UG/L

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914739

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014739A54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_ Date Analyzed: 10/21/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CAS NO. COMPOUND Q 0.5 U 74-83-9-----Bromomethane 75-01-4-----Vinyl Chloride U 1 0.5 U 75-00-3-----Chloroethane 75-09-2-----Methylene Chloride JB 15 1 75-35-4-----1,1-Dichloroethene 0.8 U 75-34-3-----1,1-Dichloroethane 0.5 U 67-66-3-----Chloroform 0.8 U 107-06-2----1,2-Dichloroethane 0.8 U 71-55-6----1,1,1-Trichloroethane U 0.8 U 56-23-5-----Carbon Tetrachloride 75-27-4-----Bromodichloromethane 0.5 U 10061-01-5----cis-1,3-Dichloropropene 0.5 U 79-01-6-----Trichloroethene U 0.8 124-48-1-----Dibromochloromethane 0.5 U 79-00-5----1,1,2-Trichloroethane 0.8 U 71-43-2-----Benzene 0.8 U 10061-02-6----trans-1,3-Dichloropropene U 0.8 75-25-2----Bromoform 0.5 U 127-18-4----Tetrachloroethene 8.0 U 79-34-5----1,1,2,2-Tetrachloroethane 0.5 U 108-88-3----Toluene 0.8 U 108-90-7-----Chlorobenzene U 0.5 100-41-4-----Ethylbenzene Ū 0.5 100-42-5-----Styrene U 0.5 78-87-5-----1,2-Dichloropropane U 0.8 U 74-87-3------Chloromethane 75-15-0-----Carbon disulfide 0.5 U 67-64-1-----Acetone 5 2 J 108-10-1-----4-Methyl-2-pentanone 2 U 591-78-6----2-hexanone 2 U 78-93-3-----2-butanone 3 U 156-60-5----trans-1,2-Dichloroethene 0.8 U 156-59-2----cis-1,2-Dichloroethene 0.5

SAMPLE NO.

MWC-2

|                                       | I ———————————————————————————————————— |
|---------------------------------------|--|
| Project: RFA254                       | Date Sampled: 10/14/98                 |
| Lab Code: COMPU Case No.: 33902 SAS 1 | No.: SDG No.: 25401                    |
| Matrix: (soil/water) WATER            | Lab Sample ID: 914739                  |
| Sample wt/vol: 25.0 (g/mL) ML         | Lab File ID: CN014739A54.D             |
| Level: (low/med) LOW                  | Date Received: 10/17/98                |
| % Moisture: not dec.                  | Date Analyzed: 10/21/98                |
| GC Column:SP624 ID: 0.53 (mm)         | Dilution Factor: 1.0                   |
| Soil Extract Volume:(uL)              | Soil Aliquot Volume:(uL)               |
| CAS NO. COMPOUND                      | CONCENTRATION UNITS: UG/L DL CONC Q    |
| 1330-20-7Xylene (total)               | 0.5 U                                  |

PZ-13I

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914745

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014745B54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_ Date Analyzed: 10/22/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 50.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: UG/L
CAS NO. COMPOUND DL CONC

| 75-01-4Vinyl Chloride       50         75-00-3Chloroethane       25         75-09-2Methylene Chloride       750       49         75-35-41,1-Dichloroethane       38       30         75-34-31,1-Dichloroethane       25       34         67-66-3Chloroform       38       30         107-06-21,2-Dichloroethane       38       30         71-55-61,1,1-Trichloroethane       38       300         56-23-5Carbon Tetrachloride       50       50         75-27-4Bromodichloromethane       25       25         10061-01-5cis-1,3-Dichloropropene       25       38         79-01-6Trichloroethene       38       140 | U   |
|---|-----|
| 75-01-4Vinyl Chloride       50         75-00-3Chloroethane       25         75-09-2Methylene Chloride       750       49         75-35-41,1-Dichloroethene       38       30         75-34-31,1-Dichloroethane       25       34         67-66-3Chloroform       38       38         107-06-21,2-Dichloroethane       38       300         56-23-5Carbon Tetrachloride       50       50         75-27-4Bromodichloromethane       25       34         10061-01-5cis-1,3-Dichloropropene       25       38         79-01-6Trichloroethene       38       140  | 1   |
| 75-00-3Chloroethane       25         75-09-2Methylene Chloride       750       49         75-35-41,1-Dichloroethane       38       30         75-34-31,1-Dichloroethane       25       34         67-66-3Chloroform       38         107-06-21,2-Dichloroethane       38         71-55-61,1,1-Trichloroethane       38       300         56-23-5Carbon Tetrachloride       50         75-27-4Bromodichloromethane       25       25         10061-01-5cis-1,3-Dichloropropene       25       38         79-01-6Trichloroethene       38       140   | ľŪ  |
| 75-09-2Methylene Chloride       750       49         75-35-41,1-Dichloroethene       38       30         75-34-31,1-Dichloroethane       25       34         67-66-3Chloroform       38         107-06-21,2-Dichloroethane       38         71-55-61,1,1-Trichloroethane       38       300         56-23-5Carbon Tetrachloride       50         75-27-4Bromodichloromethane       25         10061-01-5cis-1,3-Dichloropropene       25         79-01-6Trichloroethene       38       140  | U   |
| 75-35-41,1-Dichloroethene       38       30         75-34-31,1-Dichloroethane       25       34         67-66-3Chloroform       38       38         107-06-21,2-Dichloroethane       38       30         71-55-61,1,1-Trichloroethane       38       300         56-23-5Carbon Tetrachloride       50       50         75-27-4Bromodichloromethane       25       25         10061-01-5cis-1,3-Dichloropropene       25       38         79-01-6Trichloroethene       38       140  | -   |
| 75-34-31,1-Dichloroethane       25       34         67-66-3Chloroform       38         107-06-21,2-Dichloroethane       38         71-55-61,1,1-Trichloroethane       38         56-23-5Carbon Tetrachloride       50         75-27-4Bromodichloromethane       25         10061-01-5cis-1,3-Dichloropropene       25         79-01-6Trichloroethene       38   |     |
| 67-66-3Chloroform       38         107-06-21,2-Dichloroethane       38         71-55-61,1,1-Trichloroethane       38         56-23-5Carbon Tetrachloride       50         75-27-4Bromodichloromethane       25         10061-01-5cis-1,3-Dichloropropene       25         79-01-6Trichloroethene       38       140   | 1   |
| 107-06-21, 2-Dichloroethane       38         71-55-61, 1, 1-Trichloroethane       38         56-23-5Carbon Tetrachloride       50         75-27-4Bromodichloromethane       25         10061-01-5cis-1, 3-Dichloropropene       25         79-01-6Trichloroethene       38       140  | บ   |
| 71-55-61,1,1-Trichloroethane       38       300         56-23-5Carbon Tetrachloride       50         75-27-4Bromodichloromethane       25         10061-01-5cis-1,3-Dichloropropene       25         79-01-6Trichloroethene       38       140  | Ū   |
| 56-23-5Carbon Tetrachloride       50         75-27-4Bromodichloromethane       25         10061-01-5cis-1,3-Dichloropropene       25         79-01-6Trichloroethene       38       140  |     |
| 75-27-4Bromodichloromethane 25<br>10061-01-5cis-1,3-Dichloropropene 25<br>79-01-6Trichloroethene 38 140   | U   |
| 10061-01-5cis-1,3-Dichloropropene 25<br>79-01-6Trichloroethene 38 140   | Ü   |
| 79-01-6Trichloroethene 38 140   | Ū   |
|   | U   |
| 124-48-1Dibromochloromethane 25   | U   |
|   | U   |
|   | U   |
|   |     |
|   | U   |
|   | U   |
| 127-18-4Tetrachloroethene 38 800  | T T |
|   | U   |
|   | U   |
|   | U   |
|   | U   |
|   | U   |
|   | Ū   |
|   | U   |
| 75 25 0   | Ŭ I |
|   | JB  |
|   | Ŭ   |
| 351 70 0 1 1131311313   | IJ  |
| 70 33 3   | _   |
| 150 00 5  | Ū   |
| 156-59-2cis-1,2-Dichloroethene 25 47  | _   |
|   | Ū   |

SAMPLE NO.
PZ-13I

| Project: RFA254      |                 | Date Sampl      | ed: 10/14/98             |     |
|----------------------|-----------------|-----------------|--------------------------|-----|
| Lab Code: COMPU      | Case No.: 33902 | SAS No.:        | SDG No.: 25401           |     |
| Matrix: (soil/water) | WATER           | Lab Sample      | ID: 914745               |     |
| Sample wt/vol:       | 25.0 (g/mL) ML  | Lab File I      | D: CN014745B54.1         | C   |
| Level: (low/med)     | LOW             | Date Recei      | ved: 10/17/98            |     |
| % Moisture: not dec. |                 | Date Analy      | zed: 10/22/98            |     |
| GC Column:SP624      | ID: 0.53 (mm)   | Dilution F      | actor: 50.0              |     |
| Soil Extract Volume: | (uL)            | Soil Aliqu      | ot Volume:(ı             | ıL) |
| CAS NO.              | COMPOUND        | CONCENTRA<br>DL | TION UNITS: UG/L<br>CONC | Q   |
| 1330-20-7Xy          | lene (total)    |                 | 25                       | U   |

SAMPLE NO.

PZ-19I

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914735

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014735A54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_ Date Analyzed: 10/21/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: UG/L
CAS NO. COMPOUND DL CONC

| 74-83-9Bromomethane       0.5       U         75-01-4Vinyl Chloride       1       U         75-00-3Chloroethane       0.5       U         75-09-2Methylene Chloride       15       2 JB         75-35-41,1-Dichloroethane       0.8       U         75-34-31,1-Dichloroethane       0.5       U         67-66-3Chloroform       0.8       U         107-06-21,2-Dichloroethane       0.8       U         71-55-61,1,1-Trichloroethane       0.8       U         75-27-4Bromodichloromethane       0.5       U         10061-01-5cis-1,3-Dichloropropene       0.5       U         79-01-6Trichloroethane       0.8       4         124-48-1Dibromochloromethane       0.8       U         79-00-51,1,2-Trichloroethane       0.8       U         10061-02-6   |                                  |      |                                       |
|---|----------------------------------|------|---------------------------------------|
| 75-01-4Vinyl Chloride       1       U         75-00-3Chloroethane       0.5       U         75-09-2Methylene Chloride       15       2 JB         75-35-41,1-Dichloroethane       0.8       U         75-34-31,1-Dichloroethane       0.5       U         67-66-3Chloroform       0.8       U         107-06-21,2-Dichloroethane       0.8       U         71-55-61,1,1-Trichloroethane       0.8       U         75-27-4Bromodichloromethane       0.5       U         10061-01-5  | 74 02 0 Promomothano             | 0.5  | TT.                                   |
| 75-00-3Chloroethane       0.5       U         75-09-2Methylene Chloride       15       2 JB         75-35-41,1-Dichloroethene       0.8       U         75-34-31,1-Dichloroethane       0.5       U         67-66-3Chloroform       0.8       U         107-06-21,2-Dichloroethane       0.8       U         71-55-61,1,1-Trichloroethane       0.8       U         56-23-5Carbon Tetrachloride       1       U         75-27-4Bromodichloromethane       0.5       U         10061-01-5cis-1,3-Dichloropropene       0.5       U         79-01-6Trichloroethene       0.8       4         124-48-1Dibromochloromethane       0.5       U         79-00-51,1,2-Trichloroethane       0.8       U         79-00-51,1,2-Trichloroethane       0.8       U         1061-02-6trans-1,3-Dichloropropene       0.8       U         75-25-2Bromoform       0.5       U         127-18-4Tetrachloroethene       0.8       0.3       J         79-34-51,1,2,2-Tetrachloroethane       0.5       U         108-88-3 |                                  | = ]  | -                                     |
| 75-09-2Methylene Chloride       15       2 JB         75-35-41,1-Dichloroethene       0.8       U         75-34-31,1-Dichloroethane       0.5       U         67-66-3Chloroform       0.8       U         107-06-21,2-Dichloroethane       0.8       U         71-55-61,1,1-Trichloroethane       0.8       U         56-23-5Carbon Tetrachloride       1       U         75-27-4Bromodichloromethane       0.5       U         10061-01-5cis-1,3-Dichloropropene       0.5       U         79-01-6Trichloroethene       0.8       4         124-48-1Dibromochloromethane       0.5       U         79-00-51,1,2-Trichloroethane       0.8       U         1061-02-6trans-1,3-Dichloropropene       0.8       U         1061-02-6trans-1,3-Dichloropropene       0.8       U         127-18-4Bromoform       0.5       U         127-18-4Toluene       0.8       U         108-88-3Toluene       0.5       U         108-90-7Chlorobenzene       0.5       U         100-42-5                             |                                  | _ 1  | 1                                     |
| 75-35-41,1-Dichloroethene       0.8       U         75-34-31,1-Dichloroethane       0.5       U         67-66-3   |                                  |      | ( -                                   |
| 75-34-31,1-Dichloroethane       0.5         67-66-3Chloroform       0.8         107-06-21,2-Dichloroethane       0.8         71-55-61,1,1-Trichloroethane       0.8         56-23-5Carbon Tetrachloride       1         75-27-4Bromodichloromethane       0.5         10061-01-5cis-1,3-Dichloropropene       0.5         79-01-6Trichloroethane       0.8         124-48-1Dibromochloromethane       0.5         79-00-51,1,2-Trichloroethane       0.8         10061-02-6trans-1,3-Dichloropropene       0.8         127-18-4Bromoform       0.5         127-18-4Tetrachloroethene       0.8         108-88-3Toluene       0.8         108-90-7Chlorobenzene       0.5         100-41-4Styrene       0.5  |                                  | - 1  | -   -                                 |
| 67-66-3   |                                  | _    | -                                     |
| 107-06-21, 2-Dichloroethane       0.8         71-55-61, 1, 1-Trichloroethane       0.8         56-23-5Carbon Tetrachloride       1         75-27-4Bromodichloromethane       0.5         10061-01-5cis-1, 3-Dichloropropene       0.5         79-01-6Trichloroethene       0.8         124-48-1Dibromochloromethane       0.5         79-00-51, 1, 2-Trichloroethane       0.8         10061-02-6trans-1, 3-Dichloropropene       0.8         127-18-4Benzene       0.8         127-18-4Tetrachloroethene       0.5         108-88-31, 1, 2, 2-Tetrachloroethane       0.5         108-88-3Toluene       0.5         100-41-4Ethylbenzene       0.5         100-42-5Styrene       0.5   |                                  | 1    | f :                                   |
| 71-55-61,1,1-Trichloroethane       0.8         56-23-5Carbon Tetrachloride       1         75-27-4Bromodichloromethane       0.5         10061-01-5cis-1,3-Dichloropropene       0.5         79-01-6Trichloroethene       0.8         124-48-1Dibromochloromethane       0.5         79-00-51,1,2-Trichloroethane       0.8         1061-02-6Benzene       0.8         10061-02-6Bromoform       0.5         127-18-4Bromoform       0.5         127-18-4Tetrachloroethene       0.8         108-88-3   |                                  | = I  | 1 -                                   |
| 56-23-5Carbon Tetrachloride       1       U         75-27-4Bromodichloromethane       0.5       U         10061-01-5cis-1,3-Dichloropropene       0.5       U         79-01-6Trichloroethene       0.8       4         124-48-1Dibromochloromethane       0.5       U         79-00-51,1,2-Trichloroethane       0.8       U         71-43-2Benzene       0.8       U         10061-02-6trans-1,3-Dichloropropene       0.8       U         75-25-2Bromoform       0.5       U         127-18-4Tetrachloroethene       0.8       0.3         79-34-5Toluene       0.5       U         108-88-3Toluene       0.5       U         100-41-4Ethylbenzene       0.5       U         100-42-5Styrene       0.5       U  |                                  | - II | I                                     |
| 75-27-4Bromodichloromethane       0.5       U         10061-01-5cis-1,3-Dichloropropene       0.5       U         79-01-6Trichloroethene       0.8       4         124-48-1Dibromochloromethane       0.5       U         79-00-51,1,2-Trichloroethane       0.8       U         71-43-2Benzene       0.8       U         10061-02-6trans-1,3-Dichloropropene       0.8       U         75-25-2Bromoform       0.5       U         127-18-4Tetrachloroethene       0.8       0.3         79-34-5Toluene       0.5       U         108-88-3Toluene       0.5       U         100-41-4Ethylbenzene       0.5       U         100-42-5Styrene       0.5       U  |                                  | - 1  |                                       |
| 10061-01-5cis-1,3-Dichloropropene       0.5       U         79-01-6Trichloroethene       0.8       4         124-48-1Dibromochloromethane       0.5       U         79-00-51,1,2-Trichloroethane       0.8       U         71-43-2Benzene       0.8       U         10061-02-6trans-1,3-Dichloropropene       0.8       U         75-25-2Bromoform       0.5       U         127-18-4Tetrachloroethene       0.8       0.3         79-34-51,1,2,2-Tetrachloroethane       0.5       U         108-88-3Toluene       0.8       U         108-90-7Chlorobenzene       0.5       U         100-41-4Styrene       0.5       U   |                                  |      | -                                     |
| 79-01-6Trichloroethene       0.8       4         124-48-1Dibromochloromethane       0.5       U         79-00-51,1,2-Trichloroethane       0.8       U         71-43-2Benzene       0.8       U         10061-02-6trans-1,3-Dichloropropene       0.8       U         75-25-2Bromoform       0.5       U         127-18-4Tetrachloroethene       0.8       0.3         79-34-51,1,2,2-Tetrachloroethane       0.5       U         108-88-3Toluene       0.8       U         108-90-7Chlorobenzene       0.5       U         100-41-4Ethylbenzene       0.5       U         100-42-5Styrene       0.5       U  |                                  | - (  |                                       |
| 124-48-1Dibromochloromethane       0.5         79-00-51,1,2-Trichloroethane       0.8         71-43-2Benzene       0.8         10061-02-6trans-1,3-Dichloropropene       0.8         75-25-2Bromoform       0.5         127-18-4Tetrachloroethene       0.8         79-34-51,1,2,2-Tetrachloroethane       0.5         108-88-3Toluene       0.8         108-90-7Chlorobenzene       0.5         100-41-4Ethylbenzene       0.5         100-42-5Styrene       0.5   |                                  | - I  | ļ <sup>=</sup>                        |
| 79-00-51,1,2-Trichloroethane       0.8       U         71-43-2Benzene       0.8       U         10061-02-6trans-1,3-Dichloropropene       0.8       U         75-25-2Bromoform       0.5       U         127-18-4Tetrachloroethene       0.8       0.3         79-34-51,1,2,2-Tetrachloroethane       0.5       U         108-88-3Toluene       0.8       U         108-90-7Chlorobenzene       0.5       U         100-41-4Ethylbenzene       0.5       U         100-42-5Styrene       0.5       U  |                                  |      | 4                                     |
| 71-43-2Benzene       0.8         10061-02-6trans-1,3-Dichloropropene       0.8         75-25-2Bromoform       0.5         127-18-4Tetrachloroethene       0.8         79-34-51,1,2,2-Tetrachloroethane       0.5         108-88-3Toluene       0.8         108-90-7Chlorobenzene       0.5         100-41-4Ethylbenzene       0.5         100-42-5Styrene       0.5   |                                  | .    | =                                     |
| 10061-02-6trans-1,3-Dichloropropene       0.8       U         75-25-2Bromoform       0.5       U         127-18-4Tetrachloroethene       0.8       0.3         79-34-5Toluene       0.5       U         108-88-3Chlorobenzene       0.5       U         100-41-4Ethylbenzene       0.5       U         100-42-5Styrene       0.5       U  |                                  | . /  | ប                                     |
| 75-25-2Bromoform       0.5       U         127-18-4Tetrachloroethene       0.8       0.3       J         79-34-51,1,2,2-Tetrachloroethane       0.5       U         108-88-3Toluene       0.8       U         108-90-7Chlorobenzene       0.5       U         100-41-4Ethylbenzene       0.5       U         100-42-5Styrene       0.5       U  |                                  | 0.8  | ע∖                                    |
| 127-18-4Tetrachloroethene       0.8       0.3       J         79-34-51,1,2,2-Tetrachloroethane       0.5       U         108-88-3Toluene       0.8       U         108-90-7Chlorobenzene       0.5       U         100-41-4Ethylbenzene       0.5       U         100-42-5Styrene       0.5       U   |                                  | 0.8  | \ับ                                   |
| 79-34-51,1,2,2-Tetrachloroethane       0.5         108-88-3Toluene       0.8         108-90-7Chlorobenzene       0.5         100-41-4Ethylbenzene       0.5         100-42-5Styrene       0.5   | 75-25-2Bromoform                 | 0.5  | \∪                                    |
| 108-88-3Toluene       0.8         108-90-7Chlorobenzene       0.5         100-41-4Ethylbenzene       0.5         100-42-5Styrene       0.5  | 127-18-4Tetrachloroethene        | 0.8  | 0.3 J                                 |
| 108-90-7Chlorobenzene       0.5       U         100-41-4Ethylbenzene       0.5       U         100-42-5Styrene       0.5       U  | 79-34-51,1,2,2-Tetrachloroethane | 0.5  | \ <b>U</b>                            |
| 100-41-4Ethylbenzene       0.5       U         100-42-5Styrene       0.5       U  | 108-88-3Toluene                  | 0.8  | \U                                    |
| 100-42-5Styrene 0.5   | 108-90-7Chlorobenzene            | 0.5  | U                                     |
|   | 100-41-4Ethylbenzene             | 0.5  | U                                     |
| 78-87-51.2-Dichloropropage 0.8  | 100-42-5Styrene                  | 0.5  | U                                     |
| ,   | 78-87-51,2-Dichloropropane       | 0.8  | U                                     |
| 74-87-3Chloromethane  |                                  | . 1  | ប                                     |
| 75-15-0Carbon disulfide 0.5   |                                  | 0.5  | ĺΰ                                    |
| 67-64-1Acetone 5 0.9 J  |                                  |      | 0.9J                                  |
| 108-10-14-Methyl-2-pentanone 2  | · ·                              |      | , , , , , , , , , , , , , , , , , , , |
| 591-78-62-hexanone 2 U  |                                  |      | =                                     |
| 78-93-33-butanone 3   |                                  |      | j =                                   |
| 156-60-5trans-1,2-Dichloroethene 0.8 0.5 J  |                                  |      | 0.5 1                                 |
| 156-59-2cis-1,2-Dichloroethene 0.5 4  |                                  |      |                                       |
|   |                                  |      | -                                     |

SAMPLE NO.

PZ-19I

Date Sampled: 10/14/98 Project: RFA254 Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401 Matrix: (soil/water) WATER Lab Sample ID: 914735 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014735A54.D Level: (low/med) LOW Date Received: 10/17/98 % Moisture: not dec. \_\_\_\_ Date Analyzed: 10/21/98 ID: 0.53 (mm) GC Column:SP624 Dilution Factor: 1.0 Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_(uL) CONCENTRATION UNITS: UG/L CAS NO. COMPOUND CONC Q 1330-20-7-----Xylene (total)\_\_\_\_ 0.5 U

SAMPLE NO.

PZ-20D

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914736

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014736A54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 10/21/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 1.0

CAS NO.

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: UG/L
COMPOUND DL CONC

| 74-83-9Bromomethane 75-01-4Vinyl Chloride 75-00-3Chloroethane 75-09-2Methylene Chloride 75-35-41,1-Dichloroethane 75-34-3Chloroform 107-06-21,2-Dichloroethane 71-55-61,1-Trichloroethane 56-23-5   | 0.5<br>1<br>0.5<br>15<br>0.8<br>0.5<br>0.8<br>0.8    | 1   | U<br>U<br>U<br>JB<br>U<br>U<br>U<br>U<br>U  |
|---|--|-----|---|
| 75-27-4Bromodichloromethane 10061-01-5cis-1,3-Dichloropropene 79-01-6Trichloroethene 124-48-1Dibromochloromethane 79-00-51,1,2-Trichloroethane 71-43-2Benzene 10061-02-6trans-1,3-Dichloropropene 75-25-2Bromoform 127-18-4Tetrachloroethene 79-34-51,1,2,2-Tetrachloroethane | 0.5<br>0.8<br>0.5<br>0.8<br>0.8<br>0.8<br>0.5<br>0.8 |     | บ<br>บ<br>บ<br>บ<br>บ<br>บ<br>บ<br>บ<br>บ<br>บ<br>บ<br>บ<br>บ<br>บ<br>บ<br>บ<br>บ<br>บ<br>บ |
| 108-88-3Toluene 108-90-7Chlorobenzene 100-41-4Ethylbenzene 100-42-5Styrene 78-87-5Chloromethane 75-15-0Carbon disulfide 67-64-1Acetone 108-10-14-Methyl-2-pentanone 591-78-62-butanone  | 0.8<br>0.5<br>0.5<br>0.8<br>1<br>0.5<br>2<br>2       | 0.3 |   |
| 156-60-5trans-1,2-Dichloroethene<br>156-59-2cis-1,2-Dichloroethene  | 0.8  | τ   | <br><br>  |

SAMPLE NO.

PZ-20D

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914736

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014736A54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_ Date Analyzed: 10/21/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: UG/L

CAS NO. COMPOUND DL CONC Q

1330-20-7-----Xylene (total)\_\_\_\_\_\_\_\_0.5

PZ-21I

Q

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914733

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014733A54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_ Date Analyzed: 10/21/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: UG/L CAS NO. COMPOUND DL CONC

0.5 74-83-9-----Bromomethane U 75-01-4-----Vinyl Chloride U 1 0.5 75-00-3-----Chloroethane U 15 75-09-2-----Methylene Chloride 2 JB 75-35-4----1,1-Dichloroethene U 0.8 75-34-3-----1,1-Dichloroethane 0.5 U 67-66-3-----Chloroform 0.8 U 107-06-2----1,2-Dichloroethane 0.8 U 71-55-6----1,1,1-Trichloroethane 0.8 U 56-23-5-----Carbon Tetrachloride 1 U 75-27-4-----Bromodichloromethane 0.5 U 10061-01-5----cis-1,3-Dichloropropene 0.5 U 79-01-6----Trichloroethene 0.8 124-48-1-----Dibromochloromethane 0.5 U 79-00-5-----1,1,2-Trichloroethane 0.8 U 71-43-2-----Benzene 10061-02-6----trans-1,3-Dichloropropene 0.8 U 0.8 U 75-25-2-----Bromoform Ū 0.5 127-18-4-----Tetrachloroethene 0.8 U 79-34-5----1,1,2,2-Tetrachloroethane 0.5 U 108-88-3-----Toluene 0.8 U 108-90-7-----Chlorobenzene 0.5 U 0.5 U 100-41-4-----Ethylbenzene 100-42-5-----Styrene U 0.5 78-87-5----1,2-Dichloropropane Ū 0.8 74-87-3-----Chloromethane U 75-15-0-----Carbon disulfide U 0.5 67-64-1-----Acetone 5 3 | J 108-10-1----4-Methyl-2-pentanone 2 U 591-78-6----2-hexanone 2 U 78-93-3----2-butanone 3 U 156-60-5-----trans-1,2-Dichloroethene 0.8 0.5 J 156-59-2-----cis-1,2-Dichloroethene 0.5

1330-20-7-----Xylene (total)

SAMPLE NO.

PZ-21I

U

0.5

Date Sampled: 10/14/98 Project: RFA254 Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401 Matrix: (soil/water) WATER Lab Sample ID: 914733 Sample wt/vol: 25.0 (g/mL) MLLab File ID: CN014733A54.D Level: (low/med) LOW Date Received: 10/17/98 % Moisture: not dec. Date Analyzed: 10/21/98 GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 1.0 Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_ (uL) CONCENTRATION UNITS: UG/L CAS NO. COMPOUND , Q

PZ-22I

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914731

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014731B54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. Date Analyzed: 10/20/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: UG/L CAS NO. COMPOUND DL CONC

74-83-9-----Bromomethane 0.5 U U 75-01-4------Vinyl Chloride 1 0.5 U 75-00-3-----Chloroethane JB 75-09-2-----Methylene Chloride 15 75-35-4----1,1-Dichloroethene 0.8 U 75-34-3-----1,1-Dichloroethane U 0.5 67-66-3-----Chloroform 0.8 Ū 0.8 107-06-2----1,2-Dichloroethane U 71-55-6-----1,1,1-Trichloroethane 0.8 0.4 J 56-23-5-----Carbon Tetrachloride 1 U 75-27-4-----Bromodichloromethane 0.5 U 10061-01-5----cis-1,3-Dichloropropene U 0.5 79-01-6-----Trichloroethene 0.8 15 124-48-1-----Dibromochloromethane 0.5 U 79-00-5-----1,1,2-Trichloroethane 0.8 U 71-43-2-----Benzene 10061-02-6-----trans-1,3-Dichloropropene U 0.8 U 0.8 75-25-2-----Bromoform U 0.5 127-18-4-----Tetrachloroethene U 0.8 79-34-5-----1,1,2,2-Tetrachloroethane U 0.5 108-88-3-----Toluene U 0.8 U 108-90-7-----Chlorobenzene 0.5 100-41-4-----Ethylbenzene 0.5 U 100-42-5----Styrene U 0.5 78-87-5----1,2-Dichloropropane U 0.8 74-87-3-----Chloromethane U 1 75-15-0-----Carbon disulfide 0.5 2 67-64-1-----Acetone 5 108-10-1-----4-Methyl-2-pentanone 2 0.3 J 591-78-6----2-hexanone 0.4 J 2 78-93-3----2-butanone U 3 156-60-5----trans-1,2-Dichloroethene 0.8 U 0.5 156-59-2----cis-1,2-Dichloroethene 0.4 | J

SAMPLE NO.

PZ-22I

| Project: RFA254      |                 |          | Date Sampled: 3  | 10/14/98            |    |
|----------------------|-----------------|----------|------------------|---------------------|----|
| Lab Code: COMPU      | Case No.: 33902 | SAS No.: | SDG 1            | No.: 25401          |    |
| Matrix: (soil/water) | WATER           | :        | Lab Sample ID:   | 914731              |    |
| Sample wt/vol:       | 25.0 (g/mL) ML  | :        | Lab File ID:     | CN014731B54.D       |    |
| Level: (low/med)     | LOW             | ]        | Date Received:   | 10/17/98            |    |
| % Moisture: not dec. |                 | 1        | Date Analyzed:   | 10/20/98            |    |
| GC Column:SP624      | ID: 0.53 (mm)   | 1        | Dilution Factor  | :: 1.0              |    |
| Soil Extract Volume: | (uL)            | 5        | Soil Aliquot Vo  | olume:(u            | L) |
| CAS NO.              | COMPOUND        |          | CONCENTRATION DL | UNITS: UG/L<br>CONC | Q  |
| 1330-20-7Xy          | lene (total)    |          | 0.5              |                     | U  |

PZ-7I

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914741

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014741A54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_ Date Analyzed: 10/21/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 1.0

CAS NO.

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: UG/L
COMPOUND DL CONC

|               | ·                         |      |     |     |
|---------------|---------------------------|------|-----|-----|
|               | Bromomethane              | 0.5  |     | U   |
| 75-01-4       | Vinyl Chloride            | _    |     | ū   |
|               | Chloroethane              | 0.5  | _   | n_  |
|               | Methylene Chloride        | 15   | 1   | JB  |
|               | 1,1-Dichloroethene        | 0.8  |     | Ū   |
|               | 1,1-Dichloroethane        | 0.5  | 0.4 | 1   |
|               | Chloroform                | 0.8  |     | Ū   |
|               | 1,2-Dichloroethane        | 0.8  |     | U   |
|               | 1,1,1-Trichloroethane     | 0.8  | 0.3 | J   |
|               | Carbon Tetrachloride      | .  1 |     | U   |
|               | Bromodichloromethane      | 0.5  |     | U   |
|               | cis-1,3-Dichloropropene   | 0.5  |     | U   |
|               | Trichloroethene           | 0.8  | 2   | 1   |
|               | Dibromochloromethane      | 0.5  |     | U   |
|               | 1,1,2-Trichloroethane     | 0.8  |     | U   |
| 71-43-2       |                           | 0.8  |     | U   |
|               | trans-1,3-Dichloropropene | 0.8  |     | ט   |
| 75-25-2       |                           | 0.5  |     | ַּט |
| 127-18-4      | Tetrachloroethene         | 0.8  | 1   | ļ   |
| 79-34-5       | 1,1,2,2-Tetrachloroethane | 0.5  | •   | U   |
| 108-88-3      | Toluene                   | 0.8  |     | U   |
| 108-90-7      | Chlorobenzene             | 0.5  |     | U   |
| 100-41-4      | Ethylbenzene              | 0.5  |     | U   |
| 100-42-5      | Styrene                   | 0.5  |     | U   |
| 78-87-5       | 1,2-Dichloropropane       | 0.8  |     | U   |
|               | Chloromethane             | 1    |     | U   |
| 75-15-0       | Carbon disulfide          | 0.5  |     | Ū   |
| 67-64-1       |                           | 5    | 2   | J   |
|               | 4-Methyl-2-pentanone      | 2    | _   | Ū   |
| 591-78-6      |                           | 2    | ·   | Ū   |
| 78-93-3       |                           | 3    |     | Ŭ   |
|               | trans-1,2-Dichloroethene  | 0.8  |     | ับ  |
|               | cis-1,2-Dichloroethene    | 0.5  | 3   | -   |
| <del></del> - | ,                         |      |     |     |
|               |                           | ·    |     |     |

SAMPLE NO.

PZ-7I

Project: RFA254 Date Sampled: 10/14/98

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix: (soil/water) WATER Lab Sample ID: 914741

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: CN014741A54.D

Level: (low/med) LOW Date Received: 10/17/98

% Moisture: not dec. \_\_\_\_ Date Analyzed: 10/21/98

GC Column:SP624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: UG/L

CAS NO. COMPOUND DL CONC Q

1330-20-7-----Xylene (total)\_\_\_\_\_\_\_\_0.5

### 4A VOLATILE METHOD BLANK SUMMARY

**VBLKKM** 

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Lab File ID: CB981020A54.D

Lab Sample ID: VBLKKM

Date Analyzed: 10/20/98

Time Analyzed: 1122

GC Column:SP624 ID: 0.53 (mm)

Heated Purge: (Y/N) N

Instrument ID: F50054

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

|          | CAMPI II NO | LAB       | LAB           | TIME     |
|----------|-------------|-----------|---------------|----------|
|          | SAMPLE NO.  | SAMPLE ID | FILE ID       | ANALYZED |
| 01       | VLCS46      | 914269    | CN014269A54.D | 1219     |
| 02       | MWC-1       | 914729    | CN014729B54.D | 1838     |
| 03       | MWB-1       | 914730    | CN014730B54.D | 1915     |
| 04       | PZ-22I      | 914731    | CN014731B54.D | 1958     |
| 05       | MWB-4       | 914732    | CN014732B54.D | 2035     |
| 06       |             |           |               |          |
| 07<br>08 |             |           |               |          |
| 09       | <del></del> |           |               |          |
| 10       |             |           | <del></del>   |          |
| 11       |             |           | <del></del>   |          |
| 12       |             | ,         | <del></del>   |          |
| 13       |             |           |               |          |
| 14       |             |           |               |          |
| 15       |             |           |               |          |
| 16       |             |           |               |          |
| 17       |             |           |               |          |
| 18<br>19 |             |           |               |          |
| 20       |             |           |               |          |
| 21       | <del></del> |           |               |          |
| 22       |             |           |               |          |
| 23       |             |           |               |          |
| 24       | <del></del> |           |               |          |
| 25       |             |           |               |          |
| 26       |             |           |               |          |
| 27       |             |           |               |          |
| 28       |             |           |               |          |
| 29       |             |           |               |          |
| 30       |             |           | \             |          |

| COMMENTS: |   |  |
|-----------|---|--|
|           | <br>· · · · · · · · · · · · · · · · · · · |  |
|           |   |  |

|    | SAMPLE | NO. |  |
|----|--------|-----|--|
| VI | BLKKM  |     |  |

| Project:  | Date Sampled:   |
|---|---|
| Lab Code: COMPU Case No.: 33902 SAS No.   | : SDG No.: 25401  |
| Matrix: (soil/water) WATER  | Lab Sample ID: VBLKKM                                   |
| Sample wt/vol: 25.0 (g/mL) ML   | Lab File ID: CB981020A54.D                              |
| Level: (low/med) LOW  | Date Received:  |
| % Moisture: not dec.  | Date Analyzed: 10/20/98                                 |
| GC Column:SP624 ID: 0.53 (mm)   | Dilution Factor: 1.0                                    |
| Soil Extract Volume:(uL)  | Soil Aliquot Volume:(uL) .                              |
| CAS NO. COMPOUND  | CONCENTRATION UNITS: UG/L DL CONC Q                     |
| 74-83-9Bromomethane 75-01-4Vinyl Chloride 75-00-3Methylene Chloride 75-09-2Methylene Chloride 75-35-4 | 0.5<br>10.5<br>15 4 U U U U U U U U U U U U U U U U U U |

| <br>   |  |
|--------|--|
| VBLKKM |  |

SAMPLE NO.

|                      |                 |          | ' '              |               |            |
|----------------------|-----------------|----------|------------------|---------------|------------|
| Project:             |                 |          | Date Sampled:    |               |            |
| Lab Code: COMPU      | Case No.: 33902 | SAS No.: | SDG 1            | No.: 25401    |            |
| Matrix: (soil/water) | WATER           |          | Lab Sample ID:   | VBLKKM        |            |
| Sample wt/vol:       | 25.0 (g/mL) ML  | . :      | Lab File ID:     | CB981020A54.D |            |
| Level: (low/med)     | LOW             | :        | Date Received:   |               |            |
| % Moisture: not dec. |                 | 1        | Date Analyzed:   | 10/20/98      |            |
| GC Column:SP624      | ID: 0.53 (mm)   | 1        | Dilution Factor  | c: 1.0        |            |
| Soil Extract Volume: | (uL)            | :        | Soil Aliquot Vo  | olume:(uI     | <b>L</b> ) |
| CAS NO.              | COMPOUND        |          | CONCENTRATION DL | •             | Q          |
| 1330-20-7Xy          | lene (total)    |          | 0.5              |               | U          |

# VOLATILE METHOD BLANK SUMMARY

VBLKKN

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Lab File ID: CB981021A54.D

Lab Sample ID: VBLKKN

Date Analyzed: 10/21/98

Time Analyzed: 0908

GC Column:SP624 ID: 0.53 (mm)

Heated Purge: (Y/N) N

Instrument ID: F50054

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

|          |             | LAB                                     | LAB                                     | TIME     |
|----------|-------------|---|---|----------|
|          | SAMPLE NO.  | SAMPLE ID                               | FILE ID                                 | ANALYZED |
|          | =========   | ======================================= | ======================================= | =======[ |
| 01       | VLCS69      | 915022                                  | CN015022A54.D                           | 0951     |
| 02       | 1           | 914726                                  | CN014726A54.D                           | 1041     |
| 03       | PZ-21I      | 914733                                  | CN014733A54.D                           | 1116     |
|          | MW-19S      | 914734                                  | CN014734A54.D                           | 1151     |
| 05       | . –         | 914735                                  | CN014735A54.D                           | 1226     |
|          | PZ-20D      | 914736                                  | CN014736A54.D                           | 1300     |
|          | MWB-2       | 914738                                  | CN014738A54.D                           | 1409     |
|          | MWC-2       | 914739                                  | CN014739A54.D                           | 1519     |
|          | PZ-7I       | 914741                                  | CN014741A54.D                           | 1711     |
| 10       | MWB-5       | 914742                                  | CN014742A54.D                           | 1745     |
| 11       | MW-18S      | 914737                                  | CN014737A54.D                           | 1824     |
|          | MW-7S       | 914740                                  | CN014740A54.D                           | 1858     |
| 13       | MWA-5       | 914743                                  | CN014743A54.D                           | 1934     |
| 14       |             |   |   |          |
| 15       |             |   |   |          |
| 16       |             |   |   |          |
| 17       |             |   |   |          |
| 18<br>19 |             |   |   |          |
|          |             |   |   |          |
| 20<br>21 |             |   |   |          |
| 22       |             |   |   |          |
| 23       | <del></del> |   |   |          |
| 24       |             |   |   |          |
| 25       |             |   |   |          |
| 26       |             |   |   |          |
| 27       |             |   |   |          |
| 28       |             |   |   |          |
| 29       |             |   |   |          |
| 30       |             |   |   |          |
| 50       |             |   | <del></del> l                           |          |

| COMMENTS: |      |                 |      |
|-----------|------|-----------------|------|
|           | <br> | <br><del></del> | <br> |
|           |      |                 |      |

| VBLKKN |
|--------|
|--------|

|  | I   |
|--|---|
| Project: RFA254  | Date Sampled:   |
| Lab Code: COMPU Case No.: 33902 SAS No.                            | : SDG No.: 25401  |
| Matrix: (soil/water) WATER   | Lab Sample ID: VBLKKN   |
| Sample wt/vol: 25.0 (g/mL) ML                                      | Lab File ID: CB981021A54.D  |
| Level: (low/med) LOW   | Date Received:  |
| Moisture: not dec.   | Date Analyzed: 10/21/98   |
| GC Column:SP624 ID: 0.53 (mm)                                      | Dilution Factor: 1.0  |
| Soil Extract Volume:(uL)   | Soil Aliquot Volume:(uL)  |
| CAS NO. COMPOUND   | CONCENTRATION UNITS: UG/L DL CONC Q   |
| 74-83-9Bromomethane 75-01-4Vinyl Chloride 75-00-3                  | 0.5<br>1<br>0.5<br>15<br>0.8<br>0.8<br>0.8<br>0.8<br>0.8<br>0.8<br>0.8<br>0.8<br>0.8<br>0.8 |
| 156-60-5trans-1,2-Dichloroethene<br>156-59-2cis-1,2-Dichloroethene | 0.8<br>0.5  |

VBLKKN

SAMPLE NO.

| Project: RFA254                 | Date Sampled:                       |
|---------------------------------|-------------------------------------|
| Lab Code: COMPU Case No.: 33902 | SAS No.: SDG No.: 25401             |
| Matrix: (soil/water) WATER      | Lab Sample ID: VBLKKN               |
| Sample wt/vol: 25.0 (g/mL) ML   | Lab File ID: CB981021A54.D          |
| Level: (low/med) LOW            | Date Received:                      |
| % Moisture: not dec.            | Date Analyzed: 10/21/98             |
| GC Column:SP624 ID: 0.53 (mm)   | Dilution Factor: 1.0                |
| Soil Extract Volume:(uL)        | Soil Aliquot Volume:(uL)            |
| CAS NO. COMPOUND                | CONCENTRATION UNITS: UG/L DL CONC Q |
| 1330-20-7Xylene (total)         | U                                   |

# VOLATILE METHOD BLANK SUMMARY

VBLKLF

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Lab File ID: CB981022B54.D

Lab Sample ID: VBLKLF

Date Analyzed: 10/22/98

Time Analyzed: 1955

GC Column:SP624 ID: 0.53 (mm)

Heated Purge: (Y/N) N

Instrument ID: F50054

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

|    |   | LAB                                     | L <b>A</b> B                            | TIME                                    |
|----|---|---|---|---|
|    | SAMPLE NO.                              | SAMPLE ID                               | FILE ID                                 | ANALYZED                                |
|    | ======================================= | ======================================= | ======================================= | ======================================= |
| 01 | VLCS39                                  | 915825                                  | CN015825B54.D                           | 2104                                    |
| 02 | MWA-6                                   | 914744                                  | CN014744B54.D                           | 2149                                    |
| 03 | PZ-13I                                  | 914745                                  | CN014745B54.D                           | 2223                                    |
| 04 | MWA-6DUP                                | 914746                                  | CN014746B54.D                           | 2257                                    |
|    | MWB-1DL                                 | 914730                                  | CR014730B54.D                           | 0005<br>0039                            |
|    | MWA-3MS                                 | 914727                                  | CN014727B54.D<br>CN014728B54.D          |   |
|    | MWA-3MSD<br>MWA-6DL                     | 914728<br>914744                        | CR014744B54.D                           | 0113<br>0147                            |
| 09 | MWA-3                                   | 914758                                  | CR014744B54.D                           | 0221                                    |
| 10 | כ-אאויו                                 | 914730                                  | CRUIT 130B34.D                          | 0221                                    |
| 11 | · ————                                  |   |   |   |
| 12 |   |   | <del></del> ,                           |   |
| 13 |   |   |   |   |
| 14 |   |   |   |   |
| 15 |   |   |   |   |
| 16 |   |   |   |   |
| 17 |   |   |   |   |
| 18 |   |   |   |   |
| 19 |   |   |   |   |
| 20 |   |   |   |   |
| 21 |   |   |   |   |
| 22 |   |   |   |   |
| 23 |   |   |   |   |
| 24 |   |   |   |   |
| 25 |   |   |   |   |
| 26 |   |   |   | -                                       |
| 27 |   |   |   |   |
| 28 |   |   |   |   |
| 29 |   |   |   |   |
| 30 |   |   |   |   |

| COMMENTS: |      |      |             |
|-----------|------|------|-------------|
|           | <br> | <br> | <del></del> |
|           | <br> | <br> |             |

SAMPLE NO.

| Project: RFA254                         | Date Sampled:   |
|---|---|
| Lab Code: COMPU Case No.: 33902 SAS No. | : SDG No.: 25401  |
| Matrix: (soil/water) WATER              | Lab Sample ID: VBLKLF   |
| Sample wt/vol: 25.0 (g/mL) ML           | Lab File ID: CB981022B54.D  |
| Level: (low/med) LOW                    | Date Received:  |
| % Moisture: not dec.                    | Date Analyzed: 10/22/98   |
| GC Column:SP624 ID: 0.53 (mm)           | Dilution Factor: 1.0  |
| Soil Extract Volume:(uL)                | Soil Aliquot Volume:(uL)  |
| CAS NO. COMPOUND                        | CONCENTRATION UNITS: UG/L DL CONC Q   |
| 74-83-9                                 | 0.5<br>1 0.5<br>15 0.8<br>0.8<br>0.8<br>0.8<br>0.8<br>0.8<br>0.8<br>0.5<br>0.8<br>0.5<br>0.8<br>0.8<br>0.9<br>0.5<br>0.8<br>0.8<br>0.9<br>0.9<br>0.9<br>0.9<br>0.9<br>0.9<br>0.9<br>0.9 |

SAMPLE NO.

VBLKLF

|                      |                 |         | 1.                  |                     | — 1 |
|----------------------|-----------------|---------|---------------------|---------------------|-----|
| Project: RFA254      |                 |         | Date Sampled:       |                     |     |
| Lab Code: COMPU      | Case No.: 33902 | SAS No. | : SDG               | No.: 25401          |     |
| Matrix: (soil/water) | WATER           |         | Lab Sample ID:      | VBLKLF              |     |
| Sample wt/vol:       | 25.0 (g/mL) ML  | •       | Lab File ID:        | CB981022B54.D       |     |
| Level: (low/med)     | LOW             |         | Date Received:      |                     |     |
| % Moisture: not dec. |                 |         | Date Analyzed:      | 10/22/98            |     |
| GC Column:SP624      | ID: 0.53 (mm)   |         | Dilution Factor     | r: 1.0              |     |
| Soil Extract Volume: | (uL)            |         | Soil Aliquot Vo     | olume:(u            | L)  |
| CAS NO.              | COMPOUND        |         | CONCENTRATION<br>DL | UNITS: UG/L<br>CONC | Q   |
| 1330-20-7Ху          | lene (total)    |         | 0.5                 |                     | Ū   |

# WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

|    |            | SMC1   | SMC2   | SMC3   | OTHER | TOT |
|----|------------|--------|--------|--------|-------|-----|
|    | SAMPLE NO. | (DBF)# | (TOL)# | (BFB)# | )     | OUT |
|    | *========= | =====  | =====  | =====  | ===== | === |
| 01 | E101498~1  | 106    | 99     | 96     |       | 0   |
| 02 | MW-18S     | 98     | 99     | 101    |       | 0   |
| 03 | MW-19S     | 108    | 106    | 104    |       | 0   |
| 04 | MW-7S      | 110    | 106    | 111    | l     | 0   |
| 05 | MWA-3      | 96     | 98     | 92     |       | 0   |
| 06 | MWA-3MS    | 91     | 97     | 95     |       | 0   |
| 07 | MWA-3MSD   | 97     | 99     | 99     |       | 0   |
| 80 | MWA-5      | 95     | 96     | 98     |       | 0   |
| 09 | MWA-6      | 96     | 91     | 83     |       | 0   |
| 10 |            | 90     | 101    | 100    |       | 0   |
| 11 | MWA-6DUP   | 95     | 95     | 90     |       | 0   |
| 12 |            | 103    | 109    | 108    |       | 0 } |
| 13 | MWB-1DL    | 89     | 94     | 92     | ·     | 0   |
| 14 | MWB-2      | 105    | . 99   | 98     | ·}    | 0   |
| 15 | MWB-4      | 112    | 105    | 99     |       | 0   |
| 16 | MWB-5      | 101    | 104    | 103    |       | 0   |
| 17 |            | 100    | 114    | 108    |       | 0   |
| 18 | MWC-2      | 96     | 104    | 102    |       | 0   |
| 19 | PZ-13I     | 95     | 93     | 86     |       | 0   |
| 20 | PZ-19I     | 96     | 110    | 108    | ]     | 0   |
| 21 | PZ-20D     | 97     | 104    | 101    |       | 0   |
| 22 | PZ-21I     | 100    | 102    | 96     |       | 0 [ |
| 23 | PZ-22I     | 109    | 111    | 107    | {     | 0 [ |
| 24 | PZ-7I      | 92     | 97     | 98     |       | 0   |
| 25 | VBLKKM     | 111    | 105    | 102    |       | 0   |
| 26 | VBLKKN     | 116    | 104    | 97     |       | 0   |
| 27 | VBLKLF     | 100    | 94     | 83     | {     | 0   |
| 28 | VLCS39     | 89     | 100    | 101    |       | 0   |
| 29 | VLCS46     | 98     | 102    | 103    |       | 0   |
| 30 | VLCS69     | 96     | 101    | 106    |       | 0   |

|      |       |   |                      | QC LIMITS |
|------|-------|---|----------------------|-----------|
| SMCl | (DBF) | = | Dibromofluoromethane | (70-130)  |
| SMC2 | (TOL) | = | Toluene-d8           | (70-130)  |
| SMC3 | (BFB) | = | Bromofluorobenzene   | (70-130)  |

<sup>#</sup> Column to be used to flag recovery values

<sup>\*</sup> Values outside of contract required QC limits

D System Monitoring Compound diluted out

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix Spike - Sample No.: MWA-3

|   | SPIKE   | SAMPLE                                  | MS            | MS    | QC.    |
|---|---------|---|---------------|-------|--------|
|   | ADDED   | CONCENTRATION                           | CONCENTRATION | ે     | LIMITS |
| COMPOUND                                | (ug/L)  | (ug/L)                                  | (ug/L)        | REC # | REC.   |
| ======================================= | ======= | ======================================= | ==========    | ===== | =====  |
| Bromomethane                            | 450.0   | 0.000                                   | 403.2         | 90    | 20-150 |
| Vinyl Chloride                          | 450.0   | 0.000                                   | 384.8         | 86    | 20-150 |
| Chloroethane                            | 450.0   | 0.000                                   | 406.4         | 90    | 20-150 |
| Methylene Chloride                      | 450.0   | 111.9                                   | 435.5         | 72    | 20-300 |
| 1,1-Dichloroethene                      | 450.0   | 189.2                                   | 586.9         | 88    | 20-150 |
| 1,1-Dichloroethane                      | 450.0   | 89.06                                   | 469.5         | 84    | 20-150 |
| Chloroform                              | 450.0   | 0.000                                   | 402.7         | 89    | 20-150 |
| 1,2-Dichloroethane                      | 450.0   | 0.000                                   | 418.1         | 93    | 20-150 |
| 1,1,1-Trichloroethane                   | 450.0   | 1652                                    | 1915          | 58    | 20-150 |
| Carbon Tetrachloride                    | 450.0   | 0.000                                   | 427.5         | 95    | 20-150 |
| Bromodichloromethane                    | 450.0   | 0.000                                   | 422.0         | 94    | 20-150 |
| cis-1,3-Dichloropropene                 | 450.0   | 0.000                                   | 399.2         | 89    | 20-150 |
| Trichloroethene                         | 450.0   | 181.0                                   | 625.5         | 99    | 20-150 |
| Dibromochloromethane                    | 450.0   | 0.000                                   | 423.7         | 94    | 20-150 |
| 1,1,2-Trichloroethane                   | 450.0   | 0.000                                   | 429.2         | 95    | 20-150 |
| Benzene                                 | 450.0   | 0.000                                   | 417.7         | 93    | 20-150 |
| trans-1,3-Dichloroprope                 | 450.0   | 0.000                                   | 417.0         | 93    | 20-150 |
| Bromoform                               | 450.0   | 0.000                                   | 410.2         | 91    | 20-150 |
| Tetrachloroethene                       | 450.0   | 608.3                                   | 1020          | 91    | 20-150 |
| 1,1,2,2-Tetrachloroetha                 | 450.0   | 0.000                                   | 431.6         | 96    | 20-150 |
| Toluene                                 | 450.0   | 0.000                                   | 430.9         | 96    | 20-150 |
| Chlorobenzene                           | 450.0   | 0.000                                   | 454.9         | 101   | 20-150 |
| Ethylbenzene                            | 450.0   | 0.000                                   | 440.9         | 98    | 20-150 |
| Styrene                                 | 450.0   | 0.000                                   | 420.3         | 93    | 20-150 |
| 1,2-Dichloropropane                     | 450.0   | 0.000                                   | 428.7         | 95    | 20-150 |
| Chloromethane                           | 450.0   | 0.000                                   | 409.4         | 91    | 20-150 |
| Carbon disulfide                        | 450.0   | 0.000                                   | 431.4         | 96    | 20-150 |
| Acetone                                 | 2250    | 147.2                                   | 2543          | 106   | 20-300 |
| 4-Methyl-2-pentanone                    | 2250    | 0.000                                   | 2358          | 105   | 20-300 |
| 2-hexanone                              | 2250    | 0.000                                   | 2363          | 105   | 20-300 |
|   |         |   |               | }     |        |

Lab Name: COMPUCHEM ' Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix Spike - Sample No.: MWA-3

| COMPOUND                | SPIKE  | SAMPLE        | MS            | MS    | QC.    |
|-------------------------|--------|---------------|---------------|-------|--------|
|                         | ADDED  | CONCENTRATION | CONCENTRATION | %     | LIMITS |
|                         | (ug/L) | (ug/L)        | (ug/L)        | REC # | REC.   |
| 2-butanone              | 2250   | 0.000         | 2273          | 101   | 20-300 |
| trans-1,2-Dichloroethen | 450.0  | 0.000         | 418.8         | 93    | 20-150 |
| cis-1,2-Dichloroethene  | 450.0  | 174.0         | 569.4         | 88    | 20-150 |
| Xylene (total)          | 1350   | 0.000         | 1460          | 108   | 20-150 |

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Matrix Spike - Sample No.: MWA-3

|   | SPIKE   | MSD                                     | MSD   |        |       |        |
|---|---------|---|-------|--------|-------|--------|
| ]                                       | ADDED   | CONCENTRATION                           | %     | %      | QC L  | IMITS  |
| COMPOUND                                | (ug/L)  | (ug/L)                                  | REC # | RPD#   | RPD   | REC.   |
| ======================================= | ======= | ======================================= | ===== | ====== | ===== | =====  |
| Bromomethane                            | 450.0   | 417.4                                   | 93    | 3      | 25    | 20-150 |
| Vinyl Chloride                          | 450.0   | 420.8                                   | 94    | 9      | 25    | 20-150 |
| Chloroethane                            | 450.0   | 421.3                                   | 94    | 4      | 25    | 20-150 |
| Methylene Chloride                      | 450.0   | 475.0                                   | 81    | 12     | 25    | 20-300 |
| 1,1-Dichloroethene                      | 450.0   | 593.1                                   | 90    | . 2    | 25    | 20-150 |
| 1,1-Dichloroethane                      | 450.0   | 503.1                                   | 92    | 9      | 25    | 20~150 |
| Chloroform                              | 450.0   | 414.1                                   | 92    | 3      | 25    | 20-150 |
| 1,2-Dichloroethane                      | 450.0   | 453.9                                   | 101   | 8      | 25    | 20-150 |
| 1,1,1-Trichloroethane                   | 450.0   | 1992                                    | 76    | 27*    | 25    | 20-150 |
| Carbon Tetrachloride                    | 450.0   | 441.4                                   | 98    | 3      | 25    | 20-150 |
| Bromodichloromethane                    | 450.0   | 444.0                                   | 99    | 5      | 25    | 20-150 |
| cis-1,3-Dichloropropene                 | 450.0   | 427.6                                   | 95    | 6      | 25    | 20-150 |
| Trichloroethene                         | 450.0   | 634.7                                   | 101   | 2      | 25    | 20-150 |
| Dibromochloromethane                    | 450.0   | 445.4                                   | 99    | 5      | 25    | 20-150 |
| 1,1,2-Trichloroethane                   | 450.0   | 460.8                                   | 102   | 7      | 25    | 20-150 |
| Benzene                                 | 450.0   | 436.5                                   | 97    | 4      | 25    | 20-150 |
| trans-1,3-Dichloroprope                 | 450.0   | 499.9                                   | 111 ( | 18     | 25    | 20-150 |
| Bromoform                               | 450.0   | 452.8                                   | 101   | 10     | 25    | 20-150 |
| Tetrachloroethene                       | 450.0   | 997.0                                   | 86    | 6      | 25    | 20-150 |
| 1,1,2,2-Tetrachloroetha                 | 450.0   | 462.8                                   | 103   | 7      | 25    | 20-150 |
| Toluene                                 | 450.0   | 444.0                                   | 99    | 3      | 25    | 20-150 |
| Chlorobenzene                           | 450.0   | 469.4                                   | 104   | 3      | 25    | 20-150 |
| Ethylbenzene                            | 450.0   | 435.4                                   | 97    | 1      | 25    | 20-150 |
| Styrene                                 | 450.0   | 429.1                                   | 95    | 2      | 25    | 20-150 |
| 1,2-Dichloropropane                     | 450.0   | 438.2                                   | 97    | 2      | 25    | 20-150 |
| Chloromethane                           | 450.0   | 420.3                                   | 93    | 2      | 25    | 20-150 |
| Carbon disulfide                        | 450.0   | 417.3                                   | 93    | 3      | 25    | 20-150 |
| Acetone                                 | 2250    | 2827                                    | 119   | 12     | 25    | 20-300 |
| 4-Methyl-2-pentanone                    | 2250    | 3003                                    | 133   | 24     | 25    | 20-300 |
| 2-hexanone                              | 2250    | 2950                                    | 131   | 22     | 25    | 20-300 |
|   |         |   |       |        |       |        |

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.:

SDG No.: 25401

Matrix Spike - Sample No.: MWA-3

| COMPOUND  | SPIKE<br>ADDED<br>(ug/L)       | MSD<br>CONCENTRATION<br>(ug/L) | MSD<br>%<br>REC #      | %<br>RPD#         | QC L:<br>RPD                     | IMITS<br>REC.                        |
|---|--------------------------------|--------------------------------|------------------------|-------------------|----------------------------------|--------------------------------------|
| 2-butanone<br>trans-1,2-Dichloroethen<br>cis-1,2-Dichloroethene<br>Xylene (total) | 2250<br>450.0<br>450.0<br>1350 | 2698<br>417.0<br>589.0<br>1416 | 120<br>93<br>92<br>105 | 17<br>0<br>4<br>3 | 25<br>25<br>25<br>25<br>25<br>25 | 20-300<br>20-150<br>20-150<br>20-150 |

- # Column to be used to flag recovery and RPD values with an asterisk
- \* Values outside of QC limits

RPD: 1 out of 34 outside limits

Spike Recovery: 0 out of 68 outside limits

| COMMENTS: |  |
|-----------|--|
|           |  |

WATER VOLATILE LAB CONTROL SAMPLE RECOVERY

VLCS39

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.:

SDG No.: 25401

Lab Sample ID: 915825

LCS Lot No.: SE115

Lab File ID: CN015825B54.D

Date Analyzed: 10/22/98

Purge Volume: 25.0 (mL)

Dilution Factor: 1.0

| COMPOUND   | AMOUNT<br>ADDED<br>(ug/L )   | AMOUNT<br>RECOVERED<br>(ug/L )  |  | QC<br>LIMITS   |
|--|--|---|--|--|
| 1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,2-Dichloroethane Benzene Bromodichloromethane Bromoform Bromomethane Carbon Tetrachloride Carbon disulfide Chloroethane Dibromochloromethane Styrene Tetrachloroethene Trichloroethene cis-1,2-Dichloroethene cis-1,2-Dichloropropene trans-1,2-Dichloropropene trans-1,2-Dichloropropene Xylene (total) Methylene Chloride 2-butanone 2-hexanone 4-Methyl-2-pentanone Acetone 1,1,2,2-Tetrachloroethane 1,1-Dichloroethene 1,1-Dichloropropane Chlorobenzene Chloroform | 5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00<br>5.00 | 4.58<br>5.00<br>5.32<br>4.56<br>5.42<br>5.15<br>4.36<br>4.58<br>4.71<br>4.35<br>5.29<br>4.86<br>4.80<br>5.29<br>4.55<br>5.24<br>4.48<br>4.04<br>16.01<br>5.34<br>22.89<br>23.35<br>24.40<br>23.69<br>5.06<br>4.51<br>4.50<br>5.13<br>5.11<br>4.59 | 100<br>106<br>91<br>108<br>103<br>87<br>92<br>94<br>87<br>106<br>97<br>96<br>105<br>91<br>107<br>92<br>93<br>95<br>107<br>90<br>102<br>102 | 20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150<br>20-150 |

<sup>#</sup> Column to be used to flag LCS recovery with an asterisk.
\* Values outside of QC limits.

Lab Name: COMPUCHEM

Contract: 501112

VLCS39

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Lab Sample ID: 915825

LCS Lot No.: SE115

Lab File ID: CN015825B54.D

Date Analyzed: 10/22/98

Purge Volume: 25.0 (mL)

Dilution Factor: 1.0

| COMPOUND  | AMOUNT<br>ADDED<br>(ug/L )   | AMOUNT<br>RECOVERED<br>(ug/L ) | %REC #                | QC<br>LIMITS                                   |
|---|------------------------------|--------------------------------|-----------------------|--|
| Chloromethane Ethylbenzene Toluene Vinyl Chloride | 5.00<br>5.00<br>5.00<br>5.00 | 4.54<br>4.88<br>5.18<br>4.51   | 91<br>98<br>104<br>90 | 20-150<br>20-150<br>20-150<br>20-150<br>20-150 |

<sup>#</sup> Column to be used to flag LCS recovery with an asterisk.
\* Values outside of QC limits.

LCS Recovery: 0 outside limits out of 34 total.

| COMMENTS: |
|-----------|
|           |
|           |
|           |

VLCS46

### ЗΑ WATER VOLATILE LAB CONTROL SAMPLE RECOVERY

Lab Name: COMPUCHEM Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.: SDG No.: 25401

Lab Sample ID: 914269 LCS Lot No.: SE115

Lab File ID: CN014269A54.D Date Analyzed: 10/20/98

Dilution Factor: 1.0 Purge Volume: 25.0 (mL)

|                           | AMOUNT  | AMOUNT     |        |        |
|---------------------------|---------|------------|--------|--------|
|                           | ADDED   | RECOVERED  | i      | QC     |
| COMPOUND                  | (ug/L)  | (ug/L)     | %REC # | LIMITS |
|                           | ======= | ========== | =====  | =====  |
| 1,1,1-Trichloroethane     | 5.00    | 5.07       |        | 20-150 |
| 1,1,2-Trichloroethane     | 5.00    | 4.89       | 1      | 20-150 |
| 1,2-Dichloroethane        | 5.00    | 5.10       |        | 20-150 |
| Benzene                   | 5.00    | 5.17       |        | 20-150 |
| Bromodichloromethane      | 5.00    | 5.11       |        | 20-150 |
| Bromoform                 | 5.00    | 4.82       |        | 20-150 |
| Bromomethane              | 5.00    | 5.29       | _      | 20-150 |
| Carbon Tetrachloride      | 5.00    | 5.01       | 100    | 20-150 |
| Carbon disulfide          | 5.00    | 5.14       | 103    | 20-150 |
| Chloroethane              | 5.00    | 5.10       | 102    | 20-150 |
| Dibromochloromethane      | 5.00    | 4.91       | 98     | 20-150 |
| Styrene                   | 5.00    | 5.36       | 107    | 20-150 |
| Tetrachloroethene         | 5.00    | 4.91       | 98     | 20-150 |
| Trichloroethene           | 5.00    | 5.19       | 104    | 20-150 |
| cis-1,2-Dichloroethene    | 5.00    | 4.93       | 99     | 20-150 |
| cis-1,3-Dichloropropene   | 5.00    | 5.25       | 105    | 20-150 |
| trans-1,2-Dichloroethene  | 5.00    | 4.75       | 95     | 20-150 |
| trans-1,3-Dichloropropene | 5.00    | 4.41       | 88     | 20-150 |
| Xylene (total)            | 15.00   | 16.78      | 112    | 20-150 |
| Methylene Chloride        | 5.00    | 4.89       | 98     | 20-300 |
| 2-butanone                | 25.00   | 26.22      | 105    | 20-300 |
| 2-hexanone                | 25.00   | 25.35      | 101    | 20-300 |
| 4-Methyl-2-pentanone      | 25.00   | 25.70      | 103    | 20-300 |
| Acetone                   | 25.00   | 23.82      | 95     | 20-300 |
| 1,1,2,2-Tetrachloroethane | 5.00    | 5.17       | 103    | 20-150 |
| 1,1-Dichloroethane        | 5.00    | 4.94       | 99     | 20-150 |
| 1,1-Dichloroethene        | 5.00    | 4.98       |        | 20-150 |
| 1,2-Dichloropropane       | 5.00    | 5.21       |        | 20-150 |
| Chlorobenzene             | 5.00    | 5.15       | 1      | 20-150 |
| Chloroform                | 5.00    | 5.12       | 102    | 20-150 |
|                           |         |            |        |        |

<sup>#</sup> Column to be used to flag LCS recovery with an asterisk.
\* Values outside of QC limits.

WATER VOLATILE LAB CONTROL SAMPLE RECOVERY

CLIENT SAMPLE NO.

VLCS46

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.:

SDG No.: 25401

Lab Sample ID: 914269

LCS Lot No.: SE115

Lab File ID: CN014269A54.D

Date Analyzed: 10/20/98

Purge Volume: 25.0 (mL)

Dilution Factor: 1.0

| COMPOUND       | AMOUNT<br>ADDED<br>(ug/L ) | AMOUNT<br>RECOVERED<br>(ug/L ) | %REC # | QC<br>LIMITS |
|----------------|----------------------------|--------------------------------|--------|--------------|
| Chloromethane  | 5.00                       | 4.78                           | 96     | 20-150       |
| Ethylbenzene   | 5.00                       | 5.21                           | 104    | 20-150       |
| Toluene        | 5.00                       | 5.29                           | 106    | 20-150       |
| Vinyl Chloride | 5.00                       | 4.59                           | 92     | 20-150       |

<sup>#</sup> Column to be used to flag LCS recovery with an asterisk.
\* Values outside of QC limits.

LCS Recovery: 0 outside limits out of 34 total.

| COMMENTS: |                                       |      |      |  |
|-----------|---------------------------------------|------|------|--|
|           |                                       | <br> | <br> |  |
|           |                                       |      |      |  |
|           |                                       |      |      |  |
|           | · · · · · · · · · · · · · · · · · · · |      |      |  |

VLCS69

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.:

SDG No.: 25401

Lab Sample ID: 915022

LCS Lot No.: SE115

Lab File ID: CN015022A54.D

Date Analyzed: 10/21/98

Purge Volume: 25.0 (mL)

Dilution Factor: 1.0

| COMPOUND                              | AMOUNT<br>ADDED<br>(ug/L ) | AMOUNT<br>RECOVERED<br>(ug/L )        | %REC #     | QC<br>LIMITS     |
|---------------------------------------|----------------------------|---------------------------------------|------------|------------------|
| ===================================== | =======                    | ===================================== | }          |                  |
| 1,1,1-Trichloroethane                 | 5.00                       | 4.88                                  | 98         | 20-150           |
| 1,1,2-Trichloroethane                 | 5.00                       | 5.18                                  |            | 20-150           |
| 1,2-Dichloroethane                    | 5.00                       | 5.18                                  |            | 20-150           |
| Benzene                               | 5.00                       | 4.86                                  |            | 20-150           |
| Bromodichloromethane                  | 5.00                       | 5.13                                  |            | 20-150           |
| Bromoform                             | 5.00                       | 5.20                                  |            | 20-150           |
| Bromomethane                          | 5.00                       | 4.46                                  |            | 20-150           |
| Carbon Tetrachloride                  | 5.00                       | 4.98                                  |            | 20-150           |
| Carbon disulfide                      | 5.00                       | 4.47                                  |            | 20-150           |
| Chloroethane Dibromochloromethane     | 5.00                       | 4.11                                  | 82         | 20-150           |
|                                       | 5.00<br>5.00               | 5.48<br>5.32                          | 110<br>106 | 20-150           |
| Styrene<br>  Tetrachloroethene        | 5.00                       | 5.32                                  |            | 20-150<br>20-150 |
| Trichloroethene                       | 5.00                       | 5.22                                  | 104        | 20-150           |
| cis-1,2-Dichloroethene                | 5.00                       | 4.95                                  | 99         | 20-150           |
| cis-1,3-Dichloropropene               | 5.00                       | 5.04                                  | 101        | 20-150           |
| trans-1,2-Dichloroethene              | 5.00                       | 4.88                                  | 98         | 20-150           |
| trans-1,3-Dichloropropene             | 5.00                       | 3.62                                  | 72         | 20-150           |
| Xylene (total)                        | 15.00                      | 16.46                                 | 110        | 20-150           |
| Methylene Chloride                    | 5.00                       | 4.43                                  | 89         | 20-300           |
| 2-butanone                            | 25.00                      | 21.95                                 | 88         | 20-300           |
| 2-hexanone                            | 25.00                      | 22.14                                 | 88         | 20-300           |
| 4-Methyl-2-pentanone                  | 25.00                      | 23.87                                 | 95         | 20-300           |
| Acetone                               | 25.00                      | 18.35                                 | 73         | 20-300           |
| 1,1,2,2-Tetrachloroethane             | 5.00                       | 5.01                                  | 100        | 20-150           |
| 1,1-Dichloroethane                    | 5.00                       | 4.91                                  | 98         | 20-150           |
| 1,1-Dichloroethene                    | 5.00                       | 4.41                                  | 88         | 20-150           |
| 1,2-Dichloropropane                   | 5.00                       | 5.15                                  | 103        | 20-150           |
| Chlorobenzene                         | 5.00                       | 5.26                                  | 105        | 20-150           |
| Chloroform                            | 5.00                       | 4.99                                  | 100        | 20-150           |
|                                       |                            |                                       |            |                  |

<sup>#</sup> Column to be used to flag LCS recovery with an asterisk.
\* Values outside of QC limits.

WATER VOLATILE LAB CONTROL SAMPLE RECOVERY

CLIENT SAMPLE NO.

VLCS69

Lab Name: COMPUCHEM

Contract: 501112

Lab Code: COMPU Case No.: 33902 SAS No.:

SDG No.: 25401

Lab Sample ID: 915022

LCS Lot No.: SE115

Lab File ID:

CN015022A54.D

Date Analyzed: 10/21/98

Purge Volume: 25.0 (mL)

Dilution Factor: 1.0

| COMPOUND  | AMOUNT<br>ADDED<br>(ug/L ) | AMOUNT<br>RECOVERED<br>(ug/L ) | %REC # | QC<br>LIMITS |
|---|----------------------------|--------------------------------|--------|--------------|
| Chloromethane Ethylbenzene Toluene Vinyl Chloride | 5.00                       | 3.63                           | 73     | 20-150       |
|   | 5.00                       | 5.08                           | 102    | 20-150       |
|   | 5.00                       | 5.34                           | 107    | 20-150       |
|   | 5.00                       | 3.78                           | 76     | 20-150       |

<sup>#</sup> Column to be used to flag LCS recovery with an asterisk. \* Values outside of QC limits.

LCS Recovery: 0 outside limits out of 34 total.

| COMMENTS: |      |      |             |      |   |
|-----------|------|------|-------------|------|---|
|           | <br> | <br> | <del></del> | <br> | _ |
|           |      |      |             |      |   |

Soil Study for Proposed Press Pit Foundations, Chrysler Corporation, Dayton Thermal Products, Webster Street, Dayton, Ohio

For

Leggette, Brashears and Graham, Inc. 6525 Grand Teton Plaza Madison, Wisconsin 53719

Report No. 112845-0198-032

January 19, 1998





4518 Taylorsville Road P.O. Box 51 Daylon, OH 45401-0051 937-236-8805

January 19, 1998

937-233-2016 FAX

Leggette, Brashears and Graham, Inc. 1210 West County Road E St. Paul, Minnesota 55112

Attention: Mr. Kenneth Vogel

Re: Report No. 112845-0198-032; Soil Study for Proposed Press Pit Foundations, Chrysler Corporation, Dayton Thermal Products, Webster Street, Dayton, Ohio

Dear Mr. Vogel:

Bowser-Momer is pleased to submit our report of the soil study for the above-referenced project. The purpose of the study was to determine the physical characteristics of the soil strata and allowable bearing capacities for the proposed press pit foundations. Also noted are other conditions that could affect the design and/or construction of the press pit foundations.

The samples submitted to our company that were not used to perform the laboratory tests will be kept in our laboratory for 30 days unless you advise us otherwise. If you have any questions or if we can help you in any way on this or future projects, please call the undersigned.

Respectfully submitted,

BOWSER MORNER ASSOCIATES, INC.

Richard J. Y. Tseng, Ph.D. P.F. Senior George Christian Engineer

BFW/RJYT/krd
3-Addressee
1-Wisconsin Office
6525 Grand Teton Plaza
Madison, Wisconsin 53719
Attn. Mr. Kai S. Hansen
1-BMI Toledo Office
2-File

## TABLE OF CONTENTS

| <u>SECT</u> | <u>PAGE N</u>   |
|-------------|---|
| I           | TEXT  |
|             | 1.0 INTRODUCTION1   |
|             | 2.0 WORK PERFORMED1   |
|             | 2.1 FIELD WORK1   |
|             | 2.2 LABORATORY WORK1  |
|             | 3.0 SOIL AND GROUND WATER CONDITIONS2                               |
|             | 4.0 <u>DISCUSSION AND RECOMMENDATIONS</u>                           |
|             | 4.1 PROJECT DESCRIPTION3  |
|             | 4.2 FOUNDATION RECOMMENDATIONS4                                     |
|             | 4.3 COMPACTION REQUIREMENTS6  |
|             | 4.4 FOUNDATION EXCAVATIONS7   |
|             | 4.5 CONSTRUCTION DEWATERING8  |
|             | 4.6 CONSIDERATIONS OF LATERAL EARTH PRESSURE8                       |
|             | 5.0 <u>CLOSURE</u> 9  |
|             | 5.1 BASIS OF RECOMMENDATIONS9                                       |
|             | 5.2 LIMITATIONS AND ADDITIONAL SERVICES10                           |
|             | 5.3 WARRANTY11  |
| п           | SUGGESTED SPECIFICATIONS  |
| •           | Clearing and Grading  |
| Ш           | BORING LOG TERMINOLOGY, BORING LOGS,<br>LABORATORY DATA, AND PRINTS |





SECTION I TEXT

## 1.0 INTRODUCTION

Two punch presses will be installed in the Chrysler Corporation's Dayton Thermal Products complex on Webster Street in Dayton, Ohio. A vicinity map (Figure 1) is included in Section III of this report. Our findings on the soil conditions and ground water levels with respect to the potential construction problems, and recommendations for the allowable bearing capacity for the construction of the press pit foundations are given in the report.

Authorization to proceed with this soil study was given in a signed agreement between Leggette, Brashears and Graham, Inc. and Bowser-Morner Associates, Inc. dated December 5, 1997. The work was to proceed in accordance with our proposal and agreement, Quotation No. T-8630 dated December 5, 1997.

### 2.0 WORK PERFORMED

### 2.1 FIELD WORK

Three borings were made by others under the instruction of Mr. Kai Hansen of Leggette, Brashears & Graham, Inc. at the relative locations shown on the boring location plan (Figure 2) in Section III. The boring logs and resulting data provided to us are also included in Section III. The soil samples were taken continuously using penetration resistance methods including a 140-pound hammer, a 30-inch drop, and three-inch-O.D. split-spoon samplers through the borings. The disturbed split-spoon samples were visually classified, logged, sealed in moisture-proof jars by the client, and provided to us for our evaluation. The depths where these "A"-type split-spoon samples were collected are noted on the corresponding boring logs.

### 2.2 LABORATORY WORK

One Unified Soil Classification Test was performed in accordance with ASTM D-422, D-2216, and D-2487. The purpose of this test is to determine parameters that aid in the evaluation of the general behavior of the soil. The results of this test are shown on the soil classification sheet included in Section III.

In addition, 11 moisture content determinations were made in accordance with ASTM D-2216. The moisture contents for the undocumented, brown, lean clay fill



ranged from 10.0% to 16.6% while the moisture contents for the brown sand and brown gravel ranged from 3.2% to 5.1%. The results of the laboratory tests are summarized in Table 2-1 and included in Section III of this report.

Moisture Percent Finer Than Boring No. No. 200 Sieve Depth (ft.) Content (%) 5.0 - 7.0 10.0 11.0 -13.0 5.1 13.0 - 15.0 4.6 6.6 17.0 - 19.03.2 4.7 23.0 - 25.0 2 16.6 3.5 - 5.0 9.0 - 11.04.0 13.0 - 15.0 4.7 3 7.0 - 13.03.5 17.0 - 21.0 3.4

3.6

TABLE 2-1. Summary of Laboratory Test Results

### 3.0 SOIL AND GROUND WATER CONDITIONS

23.0 - 25.0

Based on information from the three boring logs provided by the client, the soil conditions are described in descending order below:

- 7 to 9 inches of concrete floor.
- Below the concrete floor, 4.3 to 4.5 feet of undocumented fill composed of dark brown gravel with sand; brown, sandy lean clay; and dark gray, sandy lean clay.
- In the vicinity of Borings 1 and 2, and below the undocumented fill layer, 2 to 4 feet of brown, sandy lean clay.
- Below the brown, sandy, lean clay layer in Borings 1 and 2 and below the fill layer in Boring 3, brown sand and brown gravel extended to the bottoms of these borings at depths of 17 to 31 feet.

Free ground water was encountered in Borings 1 and 3 during the advancement of the borings at the depths summarized in Table 3.1.



TABLE 3-1. Summary of Ground Water Observations During Soil Exploration

| Boring<br>No. | Depth Ground Water First<br>Encountered (ft) | Depth to Ground Water at<br>Completion of Boring (ft) |
|---------------|--|---|
| 1             | . 22.0                                       | 22.0  |
| 2             | No Water                                     | No Water  |
| 3             | 23.0   | 23.0  |

Free ground water is defined as water that seeps into an open borehole before backfilling takes place. Ground water observations were made during the boring operations by noting the depth of water on the boring tools and in the open boreholes following withdrawal of the boring augers. However, it should be noted that short-term water level readings are not necessarily a reliable indication of the ground water level and that significant fluctuations may occur due to variations in rainfall and other factors. For specific questions on the soil conditions, please refer to the individual boring logs in Section III.

### 4.0 <u>DISCUSSION AND RECOMMENDATIONS</u>

### 4.1 PROJECT DESCRIPTION

Two Minster Serial #E2-300-72, 300-ton presses will be installed in the Chrysler Corporation, Dayton Thermal Products plant on Webster Street in Dayton, Ohio. The proposed site is in Bays 2 & 3 and J & K in the Dayton Thermal Products plant building. Each press will be about 6 to 16 feet wide and 30 feet long. We understand that each press pit floor will extend about 10 feet below the top of the plant floor. We assume that the bottoms of the press pit foundations will be about 12 feet below the top of the plant floor. We understand that the maximum press weight will be 93,000 pounds each. The inertial force was given by the client as 20% of the press weight and will be 18,600 pounds. The impact force was given by the client as 90,000 pounds. The total press load was provided by the client as 201,600 pounds each. Our study was limited to providing the allowable bearing capacity for the press foundation design and to providing recommendations on lateral earth pressure to be used by others for the temporary shoring design during the construction.

The following recommendations are based on this information. If the above statements are incorrect or changes are made, Bowser-Morner should be notified so that



the new data can be reviewed and additional recommendations and services can be given if required to meet the needs of your project.

### 4.2 FOUNDATION RECOMMENDATIONS

The soil conditions for the press foundation sites are indicated in the three borings made by others. We assume that the field boring operation met soil exploration standards. The soil samples were taken with three-inch-O.D. split-spoon samplers with a 140-pound hammer dropped 30 inches. The inside diameter of the spoon samplers was 2-1/2 inches.

The penetration tests were performed with 3-inch-diameter spoon samplers. The penetration test results were converted to results obtained with a standard penetration test (SPT) with a 2-inch-diameter sampler. The conversion was made with the design charts outlined in <u>Foundation Engineering Handbook</u> by H.F. Winterkorn and H.Y. Fan, published by Van Nostrand Reinhold Company (1975). The conversion chart was based on the SPT and the Burmister Standard.

The following recommended allowable bearing capacity is determined based on the converted penetration values. We understand that the press pit excavations will extend to a depth of 10 feet below the top of the floor. At that depth, the bottoms of the press pit foundations will be supported on the brown sand with gravel. A static allowable bearing capacity of 3,000 pounds per square foot (psf) should be used in the design of the press pit foundations.

The allowable bearing capacity is based on static loading conditions only. No dynamic loading information was given at the time this report was prepared. All foundation elements that will be subject to machine (dynamic) loading should be designed in structural isolation from the rest of the structure. Although the dynamic analysis is beyond the scope of this study, the following guidelines should be considered in the design of the foundation elements:

- The foundation members, including the soil immediately above the foundations (if any), should be five times the mass of the machine components applying the dynamic load.
- The vertical thickness of the supporting foundations should not be less than two feet, or as indicated by the length of anchor bolts used. The thickness should not be less than 0.2 times the least dimension of the machine support



frame or 0.1 times the largest dimension.

- The width of the foundations should be at least 1.5 times the vertical height from the floor to the point of dynamic loading.
- The center of gravity of the machine applying the dynamic loading should coincide with the center of gravity of the foundation system supporting the machine.
- The foundation depth should be at least 80% of the vertical height from the floor to the point of dynamic loading.

It should be noted that these are guidelines and are not exhaustive or intended to substitute for a detailed dynamic structural analysis. Dynamic loading is a concern for the foundation design. The dynamic structural analysis should be performed by others.

An isolation trench should be installed around each of the press foundations to reduce the vibrations transmitted to the adjacent plant floor areas. Soft fill or clay slurry can be used to fill the isolation trenches. The design of the isolation trenches is beyond the scope of this study.

Based on the soil conditions indicated in the logs for Borings 1, 2, and 3 provided by the client, 5 to 5.5 feet of undocumented fill that is relatively weak or loose to support any foundations are on the site. Foundations supported on this fill layer will settle and crack. The fill layer extended in the borings to the depths outlined in Table 4-1.

Table 4-1. Depth of Unsuitable Soils

| Boring Depth to Bottom of No. Unsuitable Soil (ft) |     |  |  |  |  |  |
|--|-----|--|--|--|--|--|
| 1  | 5.0 |  |  |  |  |  |
| 2  | 5.0 |  |  |  |  |  |
| 3  | 5.5 |  |  |  |  |  |

The excavation for any footing foundation for the associated equipment next to the presses should extend below the bottom of the unsuitable soil layer. The allowable bearing capacity for any footing foundations supported on the original, brown, sandy lean clay or on the brown sand layer at the depths outlined in Table 4-1 should be limited to a static loading pressure of 2,000 psf.



The present floor slabs in the foundation excavation areas should be saw-cut and removed. After the unsuitable soils have been removed from the foundation areas, the top foot of the exposed ground surface at the bottoms of the excavations should be compacted to 90% of the maximum dry unit weight as defined by the modified Proctor test before the granular base or foundations are constructed. Any soft soil pockets should be undercut and replaced with lean concrete fill or controlled density fill to facilitate the backfill operation since the backfill will be performed in the plant and within the small foundation excavations.

After the bottoms of the excavations has been compacted, lean concrete with a 28-day compressive strength of 1,000 psi or controlled density fill can be placed to bring the excavations to the desired grade. The foundations can be supported on the cured lean concrete fill or on the controlled density fill.

The bearing capacity of a soil is not a unique physical property of the soil, but rather it is explicitly dependent upon several factors including: footing type, size, and shape, depth of embedment, eccentricity and inclination of applied load, footing base inclination, the stiffness of the footing, the relative distance between the bottom of footing and water table, and allowable settlements. The recommended allowable bearing capacity is based on the foundation design parameters given above and the assumptions that the applied load is vertical with no eccentricity, the base is horizontal and level, and the water table is at least five feet below the bottom of the foundation. If the actual conditions vary from the parameters and assumptions stated above, Bowser-Morner should be notified so that the new information can be reviewed and additional recommendations and services can be given to meet the needs of your project.

Foundations supported on soil settle as the result of externally applied loads. Given the vibrations of the presses and with the foundations supported on the brown sand layer, the press foundations may settle. Since the design load and the characteristics of the vibration force were not defined, no estimate of the settlement of the press foundations can be performed; that work is beyond the scope of this study.

### 4.3 COMPACTION REQUIREMENTS

If any structural fill is needed, the brown sand with gravel removed from the excavation can be used as backfill. Any fill placed below the bottom elevation for a



[

foundation should be compacted to at least 95% of the maximum dry unit weight with a moisture content within 2% of the optimum moisture content as determined by the modified Proctor test (ASTM D-1557). The compaction should be accomplished by placing the fill in successive, horizontal, approximately six-inch-thick loose lifts and mechanically compacting each lift to at least the specified minimum dry density. Field density tests should be performed at a minimum rate of one per 2500 square feet of fill area and for each lift to verify that adequate compaction is achieved. Fill placed outside the press pit wall foundations will be the subgrade for the adjacent plant floor slab. Fill placed above the footing foundations as the subgrade for the floor slabs should be compacted to at least 90% of the maximum dry unit weight with a moisture content within 2% of the optimum moisture content as determined by the modified Proctor test (ASTM D-1557).

Puddling or jetting of the backfill material, including the utility trenches, should not be allowed as a compaction method. Silty or clayey soils encountered above foundation depth will often soften, and the bearing capacity may potentially be reduced if water ponds in the excavation. Soils exposed in the bases of satisfactory foundation excavations should be protected against any detrimental change in condition such as from disturbance, rain, and freezing. If possible, foundation concrete should be placed the same day the excavation is made. If this is not practical, the foundation excavations should be adequately protected. It must be emphasized that all excavations must conform to all state, federal, and local regulations relative to slope geometry.

### 4.4 FOUNDATION EXCAVATIONS

The foundation excavations should be observed to ensure that the loose, soft, or otherwise undesirable materials are removed and that the foundations and granular base layer will be supported directly on an acceptable surface. At the time of this observation, it may be necessary to use a hand penetration device in the base of the foundation excavation to ensure that the soils immediately below the foundation base are satisfactorily prepared to support the foundations. Please note that such shallow observations do not replace an adequate deep-boring program and structural fill compaction QA/QC records.

If pockets of soft, loose, or otherwise unsuitable materials are encountered in the perimeter footing excavations and it is inconvenient to lower the footings, the proposed



footing elevations may be re-established by backfilling after the undesirable materials have been removed. The excavation under each footing should extend to suitable soils, and the base of the excavation should extend one lateral foot for every foot of excavation below the bottom of the footing foundation as shown in Figure 3 in Section III. The entire excavation should then be refilled with well-compacted, engineered fill. Special care should be taken to remove the sloughed, loose, or soft materials near the base of the excavation slopes. Extra care should also be taken to tie-in the compacted fill with the excavation slopes, with benches as necessary, to ensure that no pockets of loose or soft materials are left along the excavation slopes below the foundation bearing level. The contractor should maintain temporary cut slopes in accordance with the current OSHA regulations governing trenching and slope stability.

### 4.5 CONSTRUCTION DEWATERING

At the time of our investigation, free ground water was encountered at depths of 22 to 23 feet below the existing grade as outlined in Table 3-1. Since ground water was encountered below the anticipated excavation and foundation depth, we do not anticipate that seepage will be encountered during construction. If ground water is encountered in the brown sand layer, it should be lowered by shallow wells from which the water can be pumped. The shallow wells can consist of perforated steel pipes installed vertically. However, care must be exercised when pumping from sumps that extend into silts or other granular soils since general deterioration of the bearing soils and a localized "quick" condition could result. If significant ground water influxes are noted within the excavations, other dewatering techniques should be determined at the time of construction.

The amount and type of dewatering required during construction will depend on the weather and ground water levels at the time of construction, and the effectiveness of the contractor's techniques in preventing surface runoff from entering open excavations. Typically, ground water levels are highest during winter and spring months, and lower in summer and early fall.

### 4.6 CONSIDERATIONS OF LATERAL EARTH PRESSURE

Since the excavations will be performed inside the plant and into the brown sand layer, braced sheet-pile walls will be needed to keep the side walls from caving-in and to



avoid undermining the adjacent plant floor slab on-grade and the adjacent building column foundations. The braced sheet-pile walls can be designed with a uniform pressure of 350 pounds per square foot (psf) pressure for a 10-foot-high cut. If the excavation will be 12 feet deep, the uniform pressure against the braced sheet-pile wall will be 410 psf. Additionally, any surcharge load due to the construction operation should be added onto the design of the lateral pressure against the sheet-pile walls.

The press pit walls should be designed with an "at-rest" condition with a lateral earth pressure coefficient "k<sub>o</sub>" of 0.5. We assume that the brown sand with gravel will be used as backfill behind the press-pit walls. Based on the unit weight of brown sand, brown lean clay fill or on the newly placed sand and gravel fill, at 130 pounds per cubic foot, the lateral earth pressure of 65 pounds per square foot per foot of depth should be used in the design of the sheet-pile walls and the press-pit walls. Since the ground water is at least 22 feet below the top of the floor elevation, it should not be a problem for the wall design. However, if the ground water table is higher during wet weather or under flood conditions, a water pressure of 62.4 pounds per square foot should be added to the lateral pressure against the press-pit walls to an elevation below the high water level.

### 5.0 CLOSURE

### 5.1 BASIS OF RECOMMENDATIONS

The evaluations, conclusions, and recommendations in this report are based on our interpretation of the field and laboratory data obtained during the exploration, our understanding of the project and our experience with similar sites and subsurface conditions. Data used during this exploration included, but were not necessarily limited to:

- Three exploratory borings performed by others and provided by Leggette, Brashears & Graham, Inc. during this study.
- Results of the laboratory soil tests.
- Site plan and boring locations provided by Leggette, Brashears & Graham, Inc.
- Limited interaction with Mr. Matt Peramaki, Mr. Kai Hansen, and Mr. Ken Vogel of Leggette, Brashears & Graham, Inc.
- Published soil or geologic data of this area.



In the event that changes in the project characteristics are planned, or if additional information or differences from the conditions anticipated in this report become apparent, Bowser-Morner should be notified so that the conclusions and recommendations contained in this report can be reviewed and, if necessary, modified or verified in writing.

### 5.2 LIMITATIONS AND ADDITIONAL SERVICES

The subsurface conditions discussed in this report and those shown on the boring logs represent an estimate of the subsurface conditions based on interpretation of the boring data using normally accepted geotechnical engineering judgments. Although individual test borings are representative of the subsurface conditions at the boring locations on the dates shown, they are not necessarily indicative of subsurface conditions at other locations or at other times.

It must be emphasized that the excavation and compaction of soil fill are highly influenced by weather conditions. Performing the earthwork under wet and frozen conditions is generally very difficult. Hence, compaction of wet silty and clayey soil should be avoided during wet and frozen conditions because the wet soil cannot be compacted to the required unit weight without drying or other soil stabilization methods.

Regardless of the thoroughness of a subsurface exploration, there is the possibility that conditions between borings will differ from those at the boring locations, that conditions are not as anticipated by designers, or that the construction process has altered the soil conditions. As variations in the soil profile are encountered, additional subsurface sampling and testing may be necessary to provide data required to reevaluate the recommendations of this report. Consequently, after submission of this report, it is recommended that Bowser-Morner be authorized to perform additional services to work with the designer(s) to minimize errors and omissions regarding the interpretation and implementation of this report.

Prior to construction, we recommend that Bowser-Morner:

- Work with the designers to implement the recommended geotechnical design parameters into plans and specifications.
- Consult with the design team regarding interpretation of this report.
- Establish criteria for the construction observation and testing for the soil conditions encountered at this site.



 Review final plans and specifications pertaining to geotechnical aspects of design.

During construction, we recommend that Bowser-Morner:

- Observe the construction, particularly the site preparation, fill placement, and foundation excavation or installation.
- Perform in-place density testing of all compacted fill.
- Perform materials testing of soil and other materials as required.
- Consult with the design team to make design changes in the event that differing subsurface conditions are encountered.

If Bowser-Morner is not retained for these services, we shall assume no responsibility for construction compliance with the design concepts, specifications or recommendations.

### 5.3 WARRANTY

Our professional services have been performed, our findings obtained and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. No other warranty, express or implied, is made.

The scope of this study did not include an environmental assessment for the presence or absence of hazardous or toxic materials in the soil, surface water, ground water or air, on, within or beyond the site studied. Any statements in the report or on the boring logs regarding odors, staining of soils or other unusual items or conditions observed are strictly for the information of our client.

To evaluate the site for possible environmental liabilities, please refer to the environmental assessment study performed by Leggette, Brashears & Graham, Inc.

This report has been prepared for the exclusive use of Leggette, Brashears & Graham, Inc. for specific application to the press foundations in Dayton Thermal Products on Webster Street in Dayton, Ohio (see Figure 1 in Section III of this report). Specific design and construction recommendations have been provided in the various sections of the report. The report shall, therefore, be used in its entirety. This report is not a bidding document and shall not be used for that purpose. Anyone reviewing this report must interpret and draw their own conclusions regarding specific construction



techniques and methods chosen. Bowser-Morner is not responsible for the independent conclusions, opinions or recommendations made by others based on the field exploration and laboratory test data presented in this report.



# SECTION II

**SPECIFICATIONS** 



### CLEARING AND GRADING SPECIFICATIONS

### I. GENERAL CONDITIONS

The contractor shall furnish all labor, materials, and equipment, and perform all work and services necessary to complete in a satisfactory manner the site preparation, excavation, filling, compaction and grading as shown on the plans and as described therein.

This work shall consist of all clearing and grading, removal of existing structures unless otherwise stated, preparation of the land to be filled, filling of the land, spreading and compaction of the fill, and all subsidiary work necessary to complete the grading of the cut and fill areas to conform with the lines, grades, slopes, and specifications.

This work is to be accomplished under the constant and continuous supervision of the Owner or his designated representative.

In these specifications the terms "approved" and "as directed" shall refer to directions to the Contractor from the Owner or his designated representative.

### II. SUBSURFACE CONDITIONS

Prior to bidding the work, the Contractor shall examine, investigate and inspect the construction site as to the nature and location of the work, and the general and local conditions at the construction site, including, without limitation, the character of surface or subsurface conditions and obstacles to be encountered on and around the construction site; and shall make such additional investigation as he may deem necessary for the planning and proper execution of the work. Borings and/or soil investigations shall have been made. Results of these borings and studies will be made available by the Owner to the Contractor upon his request, but the Owner is not responsible for any interpretations or conclusions with respect thereto made by the Contractor on the basis of such information, and the Owner further has no responsibility for the accuracy of the borings and the soil investigations.

If conditions other than those indicated are discovered by the Contractor, the Owner should be notified immediately. The material which the Contractor believes to be a changed condition should not be disturbed so that the Owner can investigate the condition.

### III. SITE PREPARATION

Within the specified areas, all trees, brush, stumps, logs, tree roots, and structures scheduled for demolition shall be removed and disposed of.

All cut and fill areas shall be properly stripped. Topsoil will be removed to its full depth and stockpiled for use in finish grading. Any rubbish, organic and other objectionable soils, and other deleterious material, shall be disposed of off the site, or as directed by the Owner or his designated representative if on site disposal is provided. In no case shall such objectionable material be allowed in or under the fill unless specifically authorized in writing.

clearing/grading Page 1 of 3 Prior to the addition of fill, the original ground shall be compacted to job specifications as outlined below. Special notice shall be given to the proposed fill area at this time. If wet spots, spongy conditions, or ground water seepage is found, corrective measures must be taken before the placement of fill.

### IV. FORMATION OF FILL AREAS

Fills shall be formed of satisfactory materials placed in successive horizontal layers of not more than eight (8) inches in loose depth for the full width of the cross section. The depth of lift may be increased if the Contractor can demonstrate the ability to compact a larger lift. If compaction is accomplished using hand-tamping equipment, lifts will be limited to 4-inch lose lifts.

All material entering the fill shall be free of organic matter such as leaves, grass, roots, and other objectionable material.

The operations on earth work shall be suspended at any time when satisfactory results cannot be obtained because of rain, freezing weather, or other unsatisfactory conditions. The Contractor shall keep the work areas graded to provide the drainage at all times.

The fill material shall be of the proper moisture content before compaction efforts are started. Wetting or drying of the material and manipulation to secure a uniform moisture content throughout the layer shall be required. Should the material be too wet to permit proper compaction or rolling, all work on all portions of the embankment thus affected shall be delayed until the material has dried to the required moisture content. The moisture content of the fill material should be no more than two (2) percentage points higher or lower than optimum unless otherwise authorized. Sprinkling shall be done with equipment that will satisfactorily distribute the water over the disced area.

Compaction operations shall be continued until the fill is compacted to not less than 90% above foundation elevation and 95% below foundation elevation, of the maximum density as determined in accordance with ASTM D-1557-91 (Modified). Any areas inaccessible to a roller shall be consolidated and compacted by mechanical tampers. The equipment shall be operated in such a manner that hardpan, cemented gravel, clay or other chunky soil material will be broken up into small particles and become incorporated with the other material in the layer.

In the construction of filled areas, starting layers shall be placed in the deepest portion of the fill, and as placement progresses, additional layers shall be constructed in horizontal planes. If directed, original slopes shall be continuously, vertically benched to provide horizontal fill planes. The size of the benches shall be formed so that the base of the bench is horizontal and the back of the bench is vertical. As many benches as are necessary to bring the site to final grade shall be constructed. Filling operations shall begin on the lowest bench, with the fill being placed in horizontal eight (8) inch loose lifts unless otherwise authorized. The filling shall progress in this manner until the entire first bench has been filled, before any fill is placed on the succeeding benches. Proper drainage shall be maintained at all times during benching and filling of the benches, to insure that all water is drained away from the fill area.

clearing/grading Rev 9/93
Page 2 of 3

•

When rock and other embankment material are excavated at approximately the same time, the rock shall be incorporated into the outer portion of the areas. Stones or fragmentary rock larger than four (4) inches in their greatest dimensions will not be allowed in the fill unless specifically authorized in writing. Rock fill shall be brought up in layers as specified or as directed, and every effort shall be exerted to fill the voids with the finer material to form a dense, compact mass. Rock or boulders shall be disposed of as deleterious material per Item III.

Frozen material shall not be placed in the fill nor shall the fill be placed upon frozen material.

The Contractor shall be responsible for the stability of all fills made under the contract, and shall replace any portion, which in the opinion of the Owner or his designated representative, has become displaced due to carelessness or negligence on the part of the Contractor. Fill damaged by inclement weather shall be repaired at the Contractor's expense.

### V. SLOPE RATIO AND STORM WATER RUN-OFF

Slopes shall not be greater than 2 (horizontal) to 1 (vertical) in both cut and fill, and storm water shall not be drained over the slopes.

### VI. GRADING

The Contractor shall furnish, operate, and maintain such equipment as is necessary to construct uniform layers, and control smoothness of grade for maximum compaction and drainage.

### VII. <u>COMPACTING</u>

The compaction equipment shall be approved equipment of such design, weight, and quantity to obtain the required density in accordance with these specifications.

### VIII. TESTING AND INSPECTION SERVICES

Testing and inspection services will be provided by the Owner.

### IX. SPECIAL CONDITIONS

Rev 9/93

## SECTION III

BORING LOG TERMINOLOGY, BORING LOGS, AND PRINTS



# IMPORTANT INFORMATION ABOUT YOUR GEOTECHNICAL ENGINEERING REPORT

More construction problems are caused by site subsurface conditions than any other factor. As troublesome as subsurface problems can be, their frequency and extent have been lessened considerably in recent years, due in large measure to programs and publications of ASFE/The Association of Engineering Firms Practicing in the Geosciences.

The following suggestions and observations are offered to help you reduce the geotechnical-related delays, cost-overruns and other costly headaches that can occur during a construction project.

### A GEOTECHNICAL ENGINEERING REPORT IS BASED ON A UNIQUE SET OF PROJECT-SPECIFIC FACTORS

A geotechnical engineering report is based on a subsurface exploration plan designed to incorporate a unique set of project-specific factors. These typically include: the general nature of the structure involved, its size and configuration: the location of the structure on the site and its orientation; physical concomitants such as access roads, parking lots, and underground utilities, and the level of additional risk which the dient assumed by virtue of limitations imposed upon the exploratory program. To help avoid costly problems, consult the geotechnical engineer to determine how any factors which change subsequent to the date of the report may affect its recommendations.

Unless your consulting geotechnical engineer indicates otherwise, your geotechnical engineering report should not be used:

- When the nature of the proposed structure is changed, for example, if an office building will be erected instead of a parking garage, or if a refrigerated warehouse will be built instead of an unrefrigerated one;
- when the size or configuration of the proposed structure is altered:
- when the location or orientation of the proposed structure is modified:
- when there is a change of ownership, or
- for application to an adjacent site.

Geotechnical engineers cannot accept responsibility for problems which may develop if they are not consulted after factors considered in their report's development have changed.

# MOST GEOTECHNICAL "FINDINGS" ARE PROFESSIONAL ESTIMATES

Site exploration identifies actual subsurface conditions only at those points where samples are taken, when they are taken. Data derived through sampling and subsequent laboratory testing are extrapolated by geo-

technical engineers who then render an opinion about overall subsurface conditions, their likely reaction to proposed construction activity, and appropriate foundation design. Even under optimal circumstances actual conditions may differ from those inferred to exist, because no geotechnical engineer, no matter how qualified, and no subsurface exploration program, no matter how comprehensive, can reveal what is hidden by earth, rock and time. The actual interface between materials may be far more gradual or abrupt than a report indicates. Actual conditions in areas not sampled may differ from predictions. Nothing can be done to prevent the unanticipated, but steps can be taken to help minimize their impact. For this reason, most experienced owners retain their geotechnical consultants through the construction stage, to identify variances, conduct additional tests which may be needed, and to recommend solutions to problems encountered on site.

# SUBSURFACE CONDITIONS CAN CHANGE

Subsurface conditions may be modified by constantly-changing natural forces. Because a geotechnical engineering report is based on conditions which existed at the time of subsurface exploration, construction decisions should not be based on a geotechnical engineering report whose adequacy may have been affected by time. Speak with the geotechnical consultant to learn if additional tests are advisable before construction starts.

Construction operations at or adjacent to the site and natural events such as floods, earthquakes or ground-water fluctuations may also affect subsurface conditions and, thus, the continuing adequacy of a geotechnical report. The geotechnical engineer should be kept apprised of any such events, and should be consulted to determine if additional tests are necessary.

### GEOTECHNICAL SERVICES ARE PERFORMED FOR SPECIFIC PURPOSES AND PERSONS

Geotechnical engineers' reports are prepared to meet the specific needs of specific individuals. A report prepared for a consulting civil engineer may not be adequate for a construction contractor, or even some other consulting civil engineer. Unless indicated otherwise, this report was prepared expressly for the dient involved and expressly for purposes indicated by the dient. Use by any other persons for any purpose, or by the dient for a different purpose, may result in problems. No individual other than the client should apply this report for its intended purpose without first conferring with the geotechnical engineer. No person should apply this report for any purpose other than that originally contemplated without first conferring with the geotechnical engineer.

# A GEOTECHNICAL ENGINEERING REPORT IS SUBJECT TO MISINTERPRETATION

Costly problems can occur when other design professionals develop their plans based on misinterpretations of a geotechnical engineering report. To help avoid these problems, the geotechnical engineer should be retained to work with other appropriate design professionals to explain relevant geotechnical findings and to review the adequacy of their plans and specifications relative to geotechnical issues.

### BORING LOGS SHOULD NOT BE SEPARATED FROM THE ENGINEERING REPORT

Final boring logs are developed by geotechnical engineers based upon their interpretation of field logs (assembled by site personnel) and laboratory evaluation of field samples. Only final boring logs customarily are included in geotechnical engineering reports. These logs should not under any circumstances be redrawn for inclusion in architectural or other design drawings, because drafters may commit errors or omissions in the transfer process. Although photographic reproduction eliminates this problem, it does nothing to minimize the possibility of contractors misinterpreting the logs during bid preparation. When this occurs, delays, disputes and unanticipated costs are the all-too-frequent result.

To minimize the likelihood of boring log misinterpretation, give contractors ready access to the complete geotechnical engineering report prepared or authorized for their use. Those who do not provide such access may proceed un-

der the mistaken impression that simply disdaiming responsibility for the accuracy of subsurface information always insulates them from attendant liability. Providing the best available information to contractors helps prevent costly construction problems and the adversarial attitudes which aggravate them to disproportionate scale.

# READ RESPONSIBILITY CLAUSES CLOSELY

Because geotechnical engineering is based extensively on judgment and opinion, it is far less exact than other design disciplines. This situation has resulted in wholly unwarranted daims being lodged against geotechnical consultants. To help prevent this problem, geotechnical engineers have developed model dauses for use in written transmittals. These are not exculpatory dauses designed to foist geotechnical engineers liabilities onto someone else. Rather, they are definitive dauses which identify where geotechnical engineers' responsibilities begin and end. Their use helps all parties involved recognize their individual responsibilities and take appropriate action. Some of these definitive dauses are likely to appear in your geotechnical engineering report, and you are encouraged to read them dosely. Your geotechnical engineer will be pleased to give full and frank answers to your questions.

# OTHER STEPS YOU CAN TAKE TO REDUCE RISK

Your consulting geotechnical engineer will be pleased to discuss other techniques which can be employed to mitigate risk. In addition, ASFE has developed a variety of materials which may be beneficial. Contact ASFE for a complimentary copy of its publications directory.

Published by



8811 Colesville Road/Suite G106/Silver Spring, Maryland 20910/(301) 565-2733

### **BORING LOG TERMINOLOGY**

### Stratum Depth:

Distance in feet and/or inches below ground surface.

#### Stratum Elevation:

Elevation in feet below ground surface elevation.

### **Description of Materials:**

Major types of soil material existing at boring location. Soil classification based on one of the following systems: Unified Soil Classification System, Ohio State Highway Classification System, Highway Research Board Classification System, Federal Aviation Authority Classification System, Visual Classification.

### Sample No.:

Sample numbers are designated consecutively, increasing with depth for each boring.

### Sample Type:

"A" Split spoon, 2" O.D., 1-3/8" I.D., 18" in length.

"B" One of the following:

Power Auger Sample
Piston Sample
Diamond Bit NX: BX: AX:
Housel Sample
Wash Sample
Denison Sample

"C" Shelby Tube 3" O.D. except where noted.

### Sample Depth:

Depth below top of ground at which appropriate sample was taken.

### Blows per 6" on Sampler:

The number of blows required to drive a 2" O.D., 1-3/8" I.D., split spoon sampler, using a 140 pound hammer with a 30 inch free fall, is recorded for 6" drive increments. (Example: 3/8/9)

#### "N" Blows/Ft.:

Standard penetration resistance. This value is based on the total number of blows required for the last 12'' of penetration. (Example: 3/8/9: N = 8 + 9 = 17)

#### **Water Observations:**

Depth of water recorded in test boring is measured from top of ground to top of water level. Initial depth indicates water level during boring, completion depth indicates water level immediately after boring, and depth after "X" number hours indicates water level after letting water rise or fall over a time period. Water observations in pervious soil are considered reliable ground water levels for that date. Water observations in impervious soils can not be considered accurate ground water measurements for that date unless records are made over several days' time. Factors such as weather, soil porosity, etc., will cause the ground water level to fluctuate for both pervious and impervious soils.

### SOIL DESCRIPTION

#### Color:

When the color of the soil is uniform throughout, the color recorded will be such as brown, grey, black and may be modified by adjectives such as light and dark. If the soil's predominant color is shaded by a secondary color, the secondary color precedes the primary color, such as: grey-brown, yellow-brown. If two major and distinct colors are swirled throughout the soil, the colors will be modified by the term mottled, such as: mottled brown and grey.

| Particle Size    | Visual                      | Soil C              | Components              |
|------------------|-----------------------------|---------------------|-------------------------|
| <b>Boulders</b>  | Larger than 8"              | Major Component:    | Minor Component Term    |
| Cobbles          | 8" to 3"                    | Gravel              | Trace 1-10%             |
| Gravel-Coarse    | 3" to 3/4"                  | Sand                | Some 11-35%             |
| Fine             | 2 mm. to 3/4"               | Süt                 | And 36-50%              |
| Sand -Coarse     | 2 mm0.6 mm.                 | Clay                |                         |
|                  | (Pencil lead size)          | -                   |                         |
| -Medium          | 0.6 mm0.2 mm.               | Moist               | ire Content             |
|                  | (Table sugar and salt size) | Term                | Relative Moisture       |
| -Fine            | 0.2 mm0.06 mm.              | Dry                 | Powdery                 |
|                  | (Powdered sugar and         | Damp                | Moisture content        |
|                  | human hair size)            | •                   | below plastic limit     |
| Silt             | 0.06 mm0.002 mm.            | Moist               | Moisture content        |
| Clay             | 0.002 and smaller           |                     | above plastic limit     |
|                  | (Particle size of both      |                     | but below liquid        |
|                  | Silt and Clay not visible   |                     | limit                   |
|                  | to naked eye)               | Wet                 | Moisture content        |
|                  |                             |                     | above liquid limit      |
| Condition of Soi | il Relative to Compactness  | Condition of Soil F | Relative to Consistency |
| Gra              | nular Material              |                     | ve Material             |
| Very Loose       | 5 blows/ft. or less         | Very Soft           | 3 blows/ft. or less     |
| Loose            | 6 to 10 blows/ft.           | Soft                | 4 to 5 blows/ft.        |
| Medium Dense     | 11 to 30 blows/ft.          | Medium Stiff        | 6 to 10 blows/ft.       |
| Dense            | 30 to 50 blows/ft.          | Stiff               | 11 to 15 blows/ft.      |
| Very Dense       | 51 blows/ft, or more        | Very Stiff          | 16 to 30 blows/ft.      |
|                  | ^                           | Hard -              | 31 blows/ft. or more    |

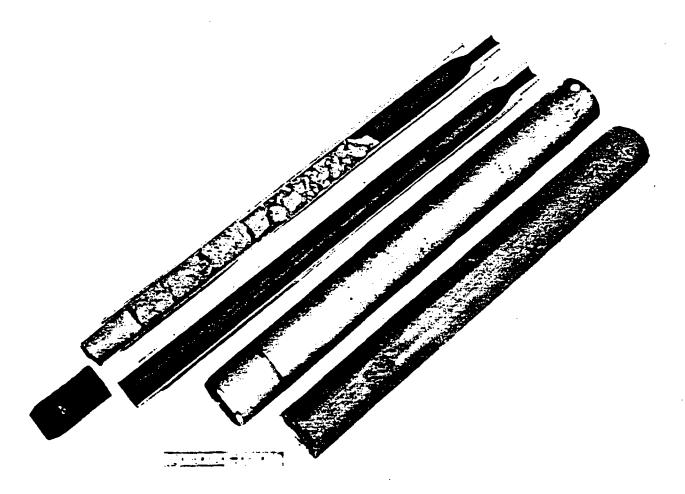
### STANDARD PENETRATION RESISTANCE (ASTM D1586)

The purpose of this test is to determine the relative consistency of the soils in a boring, or from boring to boring over the site. This method consists of making a hole in the ground and driving a 2 inch O.D. split spoon sampler into the soil with a 140 pound hammer dropped from a height of 30 inches. The sampler is driven 18 inches and the number of blows recorded for each 6 inches of penetration. Values of standard penetration (N) are determined in blows per foot, summarizing the blows required for the last two 6 inch increments of penetration.

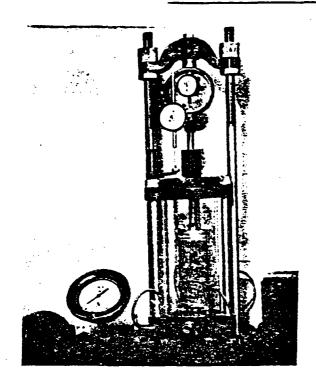
Example: 2-6-8; N = 14

### THIN-WALLED SAMPLER (ASTM D1587)

The purpose of the thin-walled sampler is to recover a relatively undisturbed soil sample for laboratory tests. The sampler is a thin-walled seamless tube with a 3 inch outside diameter, which is hydraulically pressed into the ground, at a constant rate. The ends are then sealed to prevent soil moisture loss, and the tube is returned to the laboratory for tests.

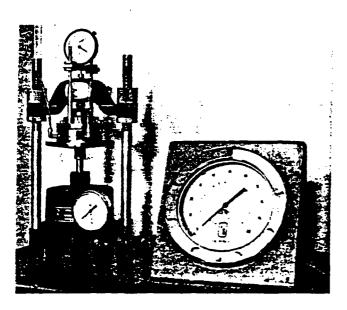


### UNCONFINED COMPRESSION OR TRIAXIAL TESTS (ASTM D 2166)



The unconfined compression test and the triaxial tests are performed to determine the shearing strength of the soil, to use in establishing its safe bearing capacity. In order to perform the unconfined compression test, it is necessary that the soil exhibit sufficient cohesion to stand in an unsupported cylinder. These tests are normally performed on samples which are 6.0 inches in height and 2.85 inches in diameter. In the triaxial test, various lateral stresses can be applied to more closely simulate the actual field conditions. There are several different types of triaxial tests. These are, however, normally performed on constant strain apparatus with a deformation rate of 0.05 inches per minute.





The purpose of this test is to determine the compressibility of the soil. This test is performed on a sample of soil which is 2.5 inches in diameter and 1.0 inch in height, and has been trimmed from relatively "undisturbed" samples. The test is performed with a lever system or an air activated piston for applying load. The loads are applied in increments and allowed to remain on the sample for a period of 24 hours. The consolidation of the sample under each individual load is measured and a curve of void ratio vs. pressure is obtained. From the information obtained in this manner and the column loads of the structure, it is possible to calculate the settlement of each individual building column. This information, together with the shearing strength of the soil, is used to determine the safe bearing capacity for a particular structure.

# REVISED TO ASTM D4318 ATTERBERG LIMITS (ASTM D423 and D424)

These tests determine the liquid and plastic limits of soils having a predominant percentage of fine particle (silt and clay) sizes. The liquid limit of a soil is the moisture content expressed as a per cent at which the soil changes from a liquid to a plastic state, and the plastic limit is the moisture content at which the soil changes from a plastic to a semi-solid state. Their difference is defined as the plasticity index (P.I. = L.L. - P.L.), which is the change in moisture content required to change the soil from a "semi-solid" to a liquid. These tests furnish information about the soil properties which is important in determining their relative swelling potential and their classifications.

### MECHANICAL ANALYSIS (ASTM 0422)

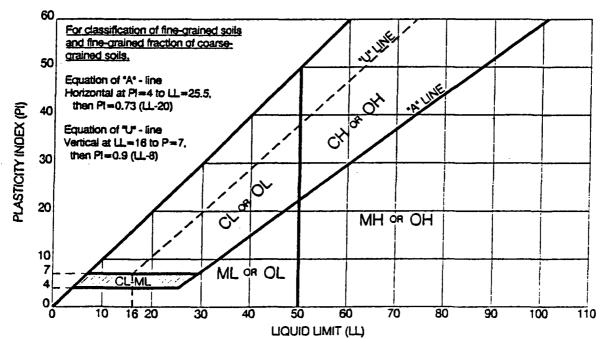
This test determines the per cent of each particle size of a soil. A sieve analysis is conducted on particle sizes greater than a No. 200 sieve (0.074 mm), and a hydrometer test on particles smaller than the No. 200 sieve. The gradation curve is drawn through the points of cumulative per cent of particle size, and plotted on semi-logarithmic paper for the combined sieve and hydrometer analysis. This test, together with the Atterberg Limits tests, is used to classify a soil.

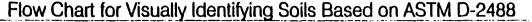
### NATURAL MOISTURE CONTENT (ASTM 02216)

The purpose of this test is to indicate the range of moisture contents present in the soil. A wet sample is weighed, placed in the constant temperature oven at 105° for 24 hours, and re-weighed. The moisture content is the change in weight divided by the dry weight.

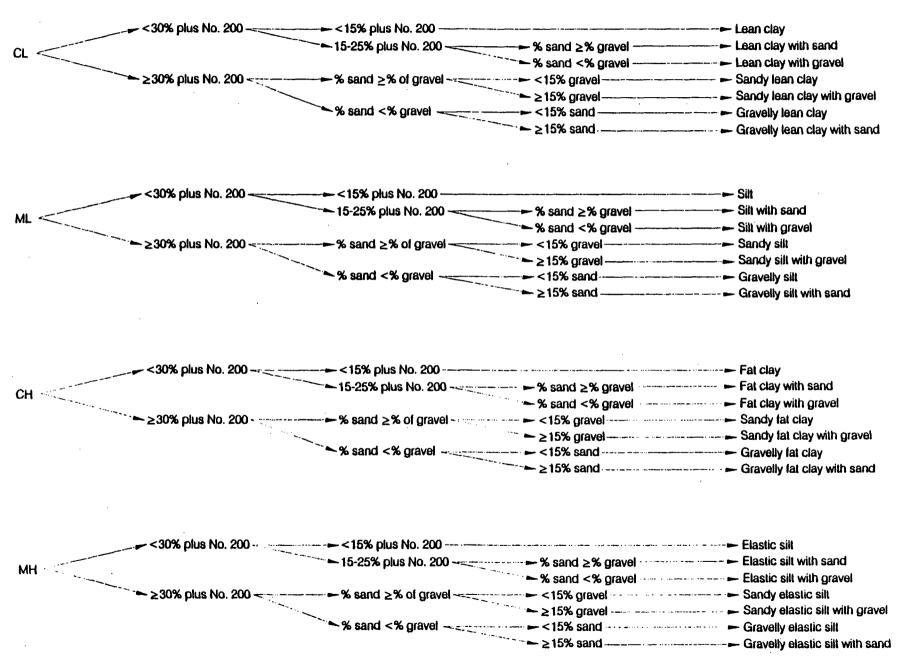
## UNIFIED CLASSIFICATION SYSTEM

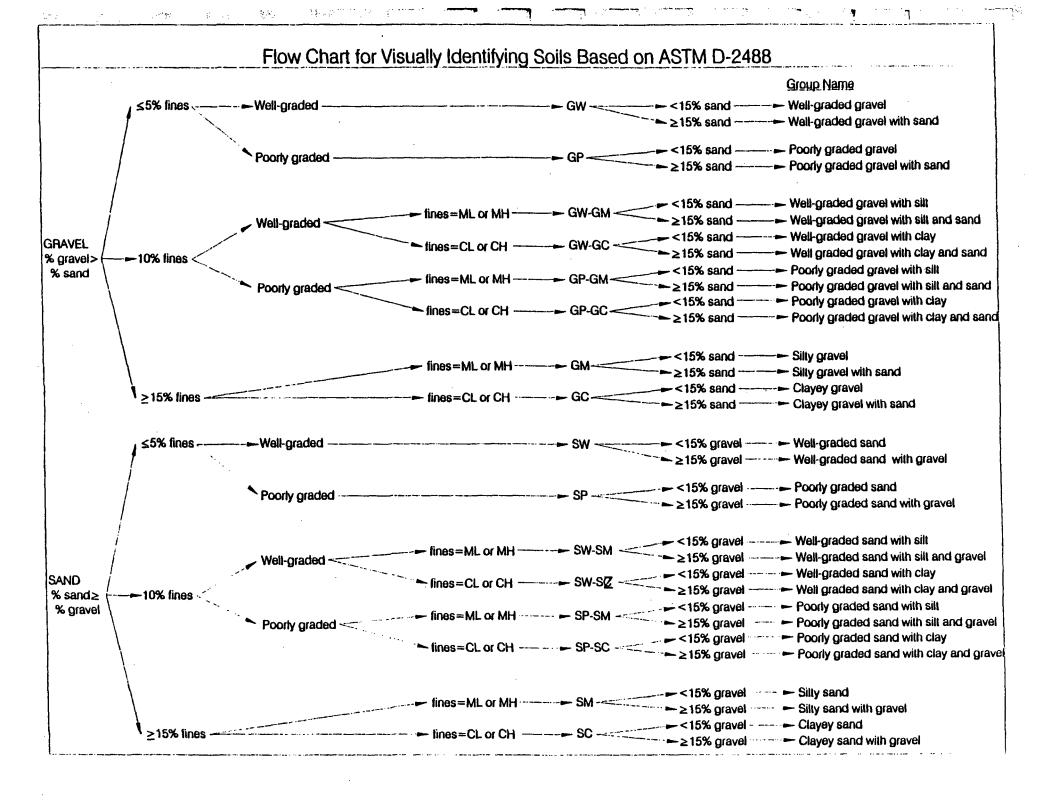
|                                       | MAJOR DIVISIONS                        | <del></del>                    | SYMBOL | LETTER<br>SYMBOL |   |
|---------------------------------------|--|--------------------------------|--------|------------------|---|
|                                       | GRAVEL AND                             | CLEAN GRAVELS<br>(LITTLE OR NO |        | GW               | WELL-GRADED GRAVEL<br>WELL-GRADED GRAVEL WITH SAND                              |
|                                       | GRAVELLY<br>SOILS                      | FINES)                         |        | GP               | POORLY GRADED GRAVEL,<br>POORLY GRADED GRAVEL WITH SAND                         |
| COARSE<br>GRAINED                     | MORE THAN 50%<br>OF COARSE             | GRAVELS WITH<br>FINES (APPRE-  |        | GM               | SILTY GRAVEL<br>SILTY GRAVEL WITH SAND  |
| SOILS                                 | FRACTION RETAINED ON NO. 4 SIEVE       | CIABLE AMT.<br>OF FINES)       |        | GC               | CLAYEY GRAVEL CLAYEY GRAVEL WITH SAND   |
| MORE THAN 50%<br>OF MATERIAL IS       | 1                                      | CLEAN SAND<br>(LITTLE OR NO    |        | sw               | WELL-GRADED SAND<br>WELL-GRADED SAND WITH GRAVEL                                |
| LARGER THAN<br>NO. 200 SIEVE<br>SIZE  |  | FINES)                         |        | SP               | POORLY GRADED SAND<br>POORLY GRADED SAND WITH GRAVEL                            |
|                                       | MORE THAN 50%<br>OF COARSE<br>FRACTION | SANDS WITH<br>FINES (APPRE-    |        | SM               | SILTY SAND<br>SILTY SAND WITH GRAVEL  |
|                                       | PASSING<br>NO. 4 SIEVE                 | CIABLE AMT.<br>OF FINES)       |        | sc               | CLAYEY SAND<br>CLAYEY SAND WITH GRAVEL  |
|                                       |  | ,                              |        | ML               | SILT, SILT WITH SAND, SANDY SILT<br>GRAVELLY SILT, GRAVELLY SILT WITH SAND      |
| FINE GRAINED                          | LABIES                                 | QUID LIMIT<br>SS THAN 50       |        | CL               | LEAN CLAY WITH SAND, SANDY LEAN CLAY,<br>GRAVELLY LEAN CLAY WITH SAND           |
| SOILS                                 |  |                                |        | OL               | ORGANIC CLAY, SANDY ORGANIC CLAY, ORGANIC SILT, SANDY ORGANIC SILT WITH GRAVEL  |
| MORE THAN 50%<br>OF MATERIAL IS       |  |                                |        | мн               | ELASTIC SILT WITH SAND, SANDY ELASTIC SILT,<br>GRAVELLY ELASTIC SILT WITH SAND  |
| SMALLER THAN<br>NO. 200 SIEVE<br>SIZE | I ARIET                                | IQUID LIMIT<br>REATER THAN 50  |        | СН               | FAT CLAY WITH SAND, SANDY FAT CLAY,<br>GRAVELLY FAT CLAY WITH SAND              |
|                                       |  |                                |        | ОН               | ORGANIC CLAY WITH SAND, SANDY ORGANIC<br>CLAY, ORGANIC SILT, SANDY ORGANIC SILT |
|                                       | HIGHLY ORG                             | ANIC SOILS                     |        | PT               | PEAT, HUMUS, SWAMP SOILS WITH<br>HIGH ORGANIC CONTENTS                          |





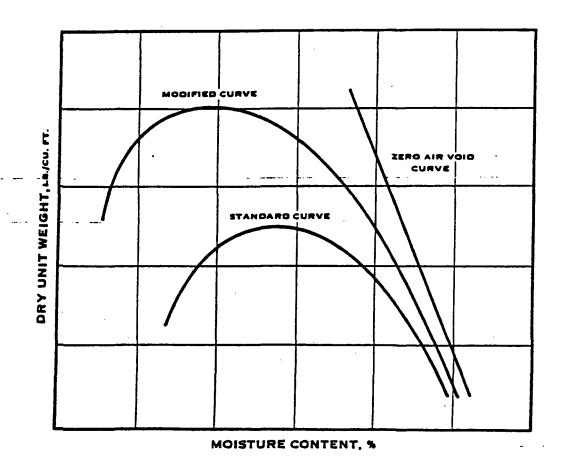






### **PROCTOR TESTS**

The purpose of these tests is to determine the maximum density and optimum moisture content of a soil. The Modified Proctor test is performed in accordance with ASTM D1557-70. The test is performed by dropping a 10 pound hammer 25 times from an 18 inch height on each of 5 equal layers of soil in a 1/30 cubic foot mold, which represents a compaction effort of 56,250 foot pounds per cubic foot. The moisture content is then raised, and this procedure is repeated. A moisture density curve is then plotted, with the density on the ordinate axis and the moisture content on the abscissa axis. The moisture content at which the maximum density requirement can be achieved with a minimum compactive effort is designated as the optimum moisture content (O.M.C.). The Standard Proctor test is performed in accordance with ASTM D698-70. This test is similar to the Modified Proctor test and is performed by dropping a 5.5 pound hammer 25 times from a height of 12 inches on 3 equal layers of soil in a 1/30 cubic foot mold, which represents a compaction effort of 12,375 foot pounds per cubic foot. This test gives proportionately lower results than the Modified Proctor test.



| CUENT LEGGETTE, BRASHEARS & GRAHAM, INC.                  |                                      |
|---|--------------------------------------|
| ST. PAUL, MINNESOTA                                       | REPORT No. 112845/hgw                |
| PROJECT PRESS PIT FOUNDATION, CHRYSLER CORP., DAYTON      | - <del></del>                        |
| THERMAL PRODUCTS, WEBSTER ST., DAYTON, OH                 | LOCATION OF BORING :                 |
|   | As shown on Boring Location Plan     |
| GROUND ELEV. NOT TAKEN METHOD 4 1/4" HSA                  |                                      |
| DRILLING COMMENTS The boring was made with a 3" spoon and | DATE, START 12/11/97 FINISH 12/11/97 |
| 140 lb. hammer.   |                                      |
|   | DRILLERS KSH, MPP                    |

|        | <del></del>                                      | <del></del>                                      |  | ************************************** | <del></del>          |                 |  |               |
|--------|--|--|--|--|----------------------|-----------------|--|---------------|
|        | 1  | l  |  |  |                      | را              | CLASSIFICATION OF MATERIAL                                 |               |
| E      | l w  | DE   | PTH  | BLOWS ON                               |                      |                 | Major Component: Minor Component Term                      | <u>.</u>      |
| DEPTH, | SAMPLE<br>NO.                                    | 1 .  | OF   | SAMPLER                                | DEPTH<br>OF          | GRAPHICS        | Gravel Trace 1-10%   | SPT "N"<br>OR |
| =      | ₹z   | J  |  | PER 6 IN                               | 国の                   | ₹I¥             | Sand Some 11-35%   | F 0           |
| ۵      | \ \oldsymbol{\sigma} \cdot \text{.}              |  | PLE, FT  | INTERVAL                               | -                    | E   5           |  | ဟ             |
|        |  | FROM   | ТО   |  |                      | S               | Clay   |               |
|        | 1A   | 0.0  | 0.6  |  | 0.6                  | $\otimes$       | (FILL) CONCRETE slab (7")                                  |               |
| 1-     | <del> </del>                                     |  |  | <u> </u>                               |                      | X               | (FILL) Dark brown GRAVEL with sand (trace shale, with lean |               |
| 1      | 2A   | 1.0  | 3.0  | 3                                      | 4                    | $\bowtie$       | clay lens) - moist   |               |
| 2-     | <del> </del>                                     | <del> </del>                                     | <del> </del>                                     | 4                                      | 4                    | $\otimes$       |  | 7             |
|        | <del> </del>                                     | <del> </del>                                     | <del> </del>                                     | 3                                      | 3.0                  | $\infty$        |  |               |
| 3-     | 3A   | 3.0  | 5.0  | 3                                      | 3.0                  | <del>- XX</del> | (FILL) Brown sandy lean CLAY (some gravel, trace bricks) - | <del></del>   |
|        | 1 37   | 3.0  | 3.0  | 3                                      | 1                    | $\times$        | damp   | 6             |
| 4-     | <del>                                     </del> | <del>                                     </del> | <del> </del>                                     | 3                                      | -                    | XX              | damp   | - 6           |
| ] _ `  | $\vdash$   | <del> </del>                                     | <del>                                     </del> | 3 4                                    | 5.0                  | $\otimes$       |  |               |
| 5-     | 4A   | 5.0  | 7.0  | 6                                      |                      |                 | (ORIGINAL) Brown sandy lean CLAY (some gravel) - damp      |               |
| 6-     |  |  |  | 6                                      | ]                    |                 |  | 14            |
|        |  |  |  | 8                                      | ]                    |                 |  |               |
| 7-     |  |  |  | 7                                      | 7.0                  |                 |  |               |
| ١.     | 5A   | 7.0  | 9.0  | 7                                      | 1                    |                 | Brown SAND with gravel - damp                              | ļ             |
| 8-     |  |  |  | 7                                      | 4                    | 4               | •  | 14            |
| .      |  |  |  | 77                                     | 4                    | 0               |  |               |
| 9-     | EA   | 9.0  | 11.0   | 12                                     | ┨                    |                 |  |               |
| •      | 6A   | 9.0  | 11.0   | 7                                      | -{                   |                 |  | 16            |
| 10-    |  |  |  | 9                                      | 1                    |                 |  | 10            |
| -      |  |  |  | 6                                      | 11.0                 |                 |  |               |
| 11-    | 7A   | 11.0   | 13.0   |  | <del>  • • • •</del> |                 | Brown GRAVEL (some cobbles, some sand) - damp              |               |
| 4.0    |  |  |  | 9                                      | ĺ                    |                 | <b>5.6.1 2.1 1.0 1.0</b>                                   | 19            |
| 12-    |  |  |  | 10                                     | 1                    | 2.              |  |               |
| 13-    |  |  |  | 7                                      |                      |                 |  |               |
| 137    | 8A   | 13.0   | 15.0   |  | }                    |                 |  |               |
| 14-    |  |  |  | 10                                     |                      | 5.              |  | 21            |
| '~]    |  |  |  | 11                                     |                      |                 | ,  | _ `           |
| 15     |  |  |  |  | 15.0                 |                 |  |               |
| 1      | 9A   | 15.0   | 17.0   |  |                      | 0               | Brown SAND with gravel - damp                              |               |
| 16     |  | ,  |  | 18                                     |                      | [ <b>∴</b> 4    |  | 36            |
|        |  |  |  | 18                                     |                      | 1:0             |  |               |
| 17-    | 104  | 170  | 19.0   | 19                                     |                      |                 |  | <b> </b>      |
| Т      | 10A  | 17.0   | 13.0   |  |                      |                 |  | 26            |
| 18-    |  |  |  | 15                                     |                      |                 |  |               |
| +      |  |  |  |  |                      | 1.5             |  | -             |
| 19-    | 114  | 19.0   | 21.0   | 13                                     |                      | · · · ·         |  | <b> </b>      |
| Т      | <del>- ' ^  </del>                               | · • · •  | 2  | 23                                     |                      | ::: <b> </b>    |  | 43            |
| 20+    |  |  |  | 20                                     |                      | 1               |  |               |
| †      | <del></del>                                      |  |  |  |                      | ::: <b> </b>    |  |               |
|        |  |  |  | DEI                                    | тH                   |                 | DATE A—SPLIT SPOON   |               |
|        |  |  |  |  | ^                    | 77 4            | ,, <del>,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, </del>         |               |

**GROUND** WATER

OBSERVATIONS

INITIAL AT COMPLETION

22.0 N/A OTHER

₮ 12/11/97 ¥ 12/11/97 ¥ N/A

A-SPLIT SPOON B-ROCK CORE

C-SHELBY-TUBE

D-OTHER

|           |               |      |                     |   |                            |          | REPORT No. 112845/hgw S   | HEET 2 | OF _2_                    |
|-----------|---------------|------|---------------------|---|----------------------------|----------|---|--------|---------------------------|
| DEPTH, FT | SAMPLE<br>NO. | 0    | PTH<br>OF<br>LE, FT | BLOWS ON<br>SAMPLER<br>PER 6 IN<br>INTERVAL | DEPTH<br>OF<br>STRATUM, FT | GRAPHICS | CLASSIFICATION OF MATERIAL  Major Component: Minor Component  Gravel Trace 1-10%  Sand Some 11-35%  Silt And 36-50%  Clay | Ferm . | SPT "N"<br>OR<br>RECOVERY |
|           | 12A           | 21.0 | 23.0                |   |                            | .0.      |   |        |                           |
| 22        | <del> </del>  |      | ļ                   | 60  | ļ                          |          | (Becomes wet at 22.0')  |        | 122                       |
|           | <del> </del>  |      | -                   | 62  | ,                          | 0        | ,   |        |                           |
| 23        | 13A           | 23.0 | 25.0                | 21  |                            |          |   |        |                           |
| 24        | <del> </del>  |      |                     | 24  |                            |          |   |        | 51                        |
|           | +             |      |                     | 27_<br>33                                   |                            | *        |   |        |                           |
| 25        | 14A           | 25.0 | 27.0                |   |                            | σ.       |   |        |                           |
| 26-       |               |      |                     | 23  |                            |          |   |        | 50                        |
|           | <del> </del>  |      |                     | 27  |                            |          |   |        | <b></b>                   |
| 27-       | 15A           | 27.0 | 29.0                | 29<br>20                                    |                            | •        |   |        |                           |
| 28-       |               |      |                     | 38  |                            | ::4      |   |        | 62                        |
| 20        |               |      |                     | 24  |                            | .0.      |   |        |                           |
| 29-       | 16A           | 29.0 | 31.0                | 31  |                            | ø.       |   |        |                           |
| 30-       | . 37          | 20.0 | <u> </u>            | 25  |                            | ::4      |   |        | 63                        |
|           |               |      |                     |   |                            |          |   |        |                           |

Bottom of Boring at 31.0'

DEPTH DATE A-SPLIT SPOON 22.0 
 ▼ 12/11/97

 ▼ 12/11/97
 GROUND INITIAL B-ROCK CORE 22.0 WATER AT COMPLETION C-SHELBY TUBE OBSERVATIONS OTHER N/A D-OTHER

| BORING | No    |   | 2  |   |
|--------|-------|---|----|---|
|        | SHEET | 1 | ΩE | 1 |

**BORING LOG** 

| CLIENT LEGGETTE, BRASHEARS & GRAHAM, INC.                 |                                      |
|---|--------------------------------------|
| ST. PAUL, MINNESOTA                                       | REPORT No. 112845/hgw                |
| PROJECT PRESS PIT FOUNDATION, CHRYSLER CORP., DAYTON      |                                      |
| THERMAL PRODUCTS, WEBSTER ST., DAYTON, OH                 | LOCATION OF BORING:                  |
|   | As shown on Boring Location Plan     |
| GROUND ELEV. NOT TAKEN METHOD 4 1/4" HSA                  |                                      |
| DRILLING COMMENTS The boring was made with a 3" spoon and | DATE, START 12/11/97 FINISH 12/11/97 |
| 140 lb. hammer.   | ·                                    |
|   | DRILLERS KSH, MPP                    |

|                  | <del></del>   | <del>                                     </del> |          | <del>                                     </del> |                        | T  | CLASSIFICATION OF MATERIAL   | <del></del> =             |
|------------------|---------------|--|----------|--|------------------------|--|--|---------------------------|
| +                |               | 00   | EPTH     | BLOWS ON   |                        | က္ခ  | Major Component: Minor Component Term  | 2                         |
| БЕРТН, FT        | SAMPLE<br>NO. | 1 7  |          | SAMPLER  | DEPTH<br>OF<br>STRATUM | GRAPHICS   | Gravel Trace 1-10%   | SPT "N"                   |
| 🖹                | ₹9            | i '  | OF       | PER 6 IN   | 品では                    | <u></u>  | Sand Some 11-35%   | E 5                       |
|                  | S             | SAM  | PLE, FT  | INTERVAL   | Q &                    | Ě  | Silt And 36-50%  | SPT "N"<br>OR<br>DECOVERY |
| "                |               | FROM   |          | EVAVE  | ST                     |  | Clay   | ª                         |
|                  | 1A            | 0.0  | 0.7      | <del> </del>                                     |                        | X  | (FILL) CONCRETÉ siab (8")  | +                         |
| 1 . 1            | 17            | 1 0.0  | + 0.7    |  | 0.7                    | $\bowtie$  |  | <del></del>               |
| 1-               | 2A            | 1.0  | 3.0      | 2  | 1                      | $\bowtie$  | (FILL) Brown to dark gray sandy lean CLAY (trace gravel) - damp  |                           |
| 1 . 1            |               | 1  |          | 4  | 1                      | $\bowtie$  | ·  | 9                         |
| 2-               |               |  |          | 5  | 7                      | $\bowtie$  |  |                           |
| 3- <del> </del>  |               |  |          | 6  | ]                      | $\bowtie$  |  |                           |
| 3]               | 3A            | 3.0  | 5.0      |  | ]                      | $\bowtie$  |  |                           |
| 4                |               |  |          | 7  |                        | $\aleph\!$ |  | 12                        |
|                  |               |  | <u> </u> | 5  |                        | $\bigotimes$   |  |                           |
| 5-               | -             |  | 1 2 0    | 8_   | 5.0                    | XX   | /ODICINALLO Description of AV (see 1)  | <del> </del> -            |
| 1 +              | 4A            | 5.0  | 7.0      | 6  | ł                      |  | (ORIGINAL) Brown sandy lean CLAY (trace gravel) - damp   | 14                        |
| 6-               |               |  | +        | 8  | ł                      |  |  | 14                        |
| l †              |               |  |          | 10   | 1                      |  |  |                           |
| 7十               | 1C            | 7.0  | 9.0      | 10   |                        |  | •  | <del> </del>              |
| ] <sub>-</sub> † |               | 7.0  | 1        |  |                        | M  |  |                           |
| 8+               |               |  |          |  |                        |  |  |                           |
| 1 . †            |               |  |          |  | 9.0                    |  |  |                           |
| 9+               | 5A            | 9.0  | 11.0     |  |                        | a  | Brown SAND with gravel - damp  |                           |
| 10               |               |  |          | 20   |                        | ::4  | ,  | 40                        |
| ΙOΙ              |               |  |          | 20   |                        | 8  |  |                           |
| 11               |               |  |          | 31   |                        | <b>!∷:</b> }   |  |                           |
| <b></b> ⊤        | 6A            | 11.0   | 13.0     |  |                        |  |  |                           |
| 12+              |               |  | <u> </u> | 13   |                        | : 1  |  | 25                        |
| ·- +             |               |  |          | 12   |                        |  |  |                           |
| 13-              | <del>-</del>  | 10.0   | 150      | 10   | ļ                      | :::1   |  |                           |
| +                | 7A            | 13.0   | 15.0     |  |                        | :::1   |  | 17                        |
| 14+              |               |  |          | 9  | i                      |  | }  |                           |
| +                |               |  |          | 8  | ĺ                      |  | <b>,</b>   |                           |
| 15-              | 8A            | 15.0   | 17.0     | 7  | 1                      | σ.]  | <b>)</b>   |                           |
| 1                | ٠٠            | 13.0   | 17.0     | 16   | ł                      | ::4  | j.   | 30                        |
| 16+              |               |  |          | 14   | ļ                      | 0.   |  |                           |
| +                |               |  |          |  | 17.0                   |  | The state of the s |                           |
| 17-              |               |  |          |  |                        |  | Bottom of Boring at 17.0'  |                           |

D-OTHER

DEPTH DATE A-SPLIT SPOON ▼ 12/11/97 ▼ 12/11/97 ▼ N/A GROUND INITIAL NONE B-ROCK CORE AT COMPLETION NONE WATER C-SHELBY TUBE

N/A **OBSERVATIONS** OTHER \_

|            |  | DRILLERS KSH, MPP                    |
|------------|--|--------------------------------------|
| DRILLING C | OMMENTS                                      | DATE, START 12/12/97 FINISH 12/12/97 |
| GROUND EL  | EV. NOT TAKEN METHOD 4 1/4" HSA              | As shown on Boring Location Plan     |
|            | THERMAL PRODUCTS, WEBSTER ST., DAYTON, OH    | LOCATION OF BORING:                  |
| PROJECT    | PRESS PIT FOUNDATION, CHRYSLER CORP., DAYTON | _                                    |
|            | ST. PAUL, MINNESOTA                          | REPORT No. 112845/hgw                |
| CLIENT     | LEGGETTE, BRASHEARS & GRAHAM, INC.           |                                      |

|                 | <del></del>   | ī    | -2                   | <del>,                                     </del> | <del></del>                | _                       | CLASSIFICATION OF MATERIAL   |               |
|-----------------|---------------|------|----------------------|---|----------------------------|-------------------------|--|---------------|
| ОЕРТН, FT       | SAMPLE<br>NO. |      | PTH<br>OF<br>PLE, FT | BLOWS ON<br>SAMPLER<br>PER 6 IN<br>INTERVAL       | DEPTH<br>OF<br>STRATUM, FT | GRAPHICS                | CLASSIFICATION OF MATERIAL  Major Component: Minor Component Term Gravel Trace 1-10% Sand Some 11-35% Silt And 36-50% Clay | SPT "N"<br>OR |
| -               | 1A            | 0.0  | 0.7                  |   | 1.0                        | XX                      | (FILL) CONCRETE slab (9")  |               |
| 1-              | 2A            | 1.0  | 3.0                  | 10  | <del>  •••</del>           | 燚                       | (FILL) Dark brown sandy lean CLAY (trace gravel, trace wood) -   |               |
| 2-              |               | -    | <del> </del> -       | 8 9   |                            | $\otimes$               | dry  | 17            |
| 3-              |               |      |                      | 12  | <u> </u>                   | $\bowtie$               |  |               |
| 3               | 3A            | 3.0  | 5.0                  | 7   | ]                          | $\bowtie$               |  |               |
| 4-              |               | -    |                      | 8   |                            | $\bowtie$               | (With trace cinders at 4.0')   | 15            |
| 5-              | 4.4           | - A  |                      | 10  |                            | $\bowtie$               |  |               |
|                 | 4A            | 5.0  | 7.0                  | 8   | 5.5                        | $\stackrel{\vee}{\sim}$ | (ORIGINAL) Brown SAND with gravel - damp   | 22            |
| 6-              |               |      |                      | 14  |                            | :4                      |  |               |
| 7               | 5A            | 7.0  | 9.0                  | <u>14</u>   |                            | ٧.                      |  |               |
| 8               | <u> </u>      |      | 9.0                  | 9   |                            | •:                      |  | 23            |
| . +             |               |      |                      | 14  |                            | ::1                     |  | -             |
| 9               | 6A            | 9.0  | 11.0                 | 12  |                            |                         |  |               |
| 10-             |               |      |                      | 20  |                            |                         |  | 53            |
| †               |               |      |                      | <u>33</u><br>39                                   |                            | J.                      |  | <u> </u>      |
| 11+             | 7A            | 11.0 | 13.0                 | 12  |                            |                         |  |               |
| 12+             |               |      |                      | 23  | :                          | ::4                     |  | 47            |
| 13              |               |      |                      | 23  | :                          | D.                      | •  |               |
| +               | 8A            | 13.0 | 15.0                 | 15<br>20  |                            | <del>-</del> :          |  | 31            |
| 14 🕇            |               |      |                      | 11  |                            |                         |  | 9,            |
| 15+             | 9A            | 15.0 | 17.0                 | . 12  |                            |                         |  | <u> </u>      |
| †               | <del>JA</del> | 15.0 | 17.0                 | 15  |                            |                         |  | 36            |
| 16+             |               |      |                      | 21  |                            | 0                       |  |               |
| 17+             | 10A           | 17.0 | 19.0                 | 10  |                            |                         |  |               |
| 18#             |               |      |                      | 20  |                            |                         |  | 46            |
| +               |               |      |                      | 26<br>33  |                            | 0                       |  | <del> </del>  |
| 19 🛨            | 11A           | 19.0 | 20.0                 | 30  |                            |                         | (Trace cobbles at 19.0')   |               |
| 20 <del> </del> |               |      |                      | 125/4"  |                            | 1                       | ļ  | 100+          |
| +               |               |      |                      |   |                            |                         |  | <del></del>   |
|                 |               |      |                      | DEP   | тн                         |                         | DATE A—SPLIT SPOON   |               |

GROUND INITIAL WATER AT COMPLETION OBSERVATIONS OTHER

INITIAL 23.0 

APLETION 23.0 

■ 12/12/97

OTHER N/A 

■ N/A

B-ROCK CORE C-SHELBY TUBE D-OTHER

| BORING | No. | 3 |  |
|--------|-----|---|--|
| 3013   |     |   |  |

REPORT No. 112845/hgw SHEET 2 OF CLASSIFICATION OF MATERIAL DEPTH OF STRATUM, FT OR RECOVERY **BLOWS ON** GRAPHICS Major Component: Minor Component Term рертн, гт SAMPLE NO. DEPTH Gravel Trace 1-10% SAMPLER OF Sand Some 11-35% PER 6 IN SAMPLE, FT Silt And 36-50% INTERVAL Clay FROM TO 12A 21.0 23.0 11 23 48 22 25 23 (Becomes wet at 23.0') 13A 23.0 24.5 12 23 100+ 24 120 25 (Trace cobbles at 25.0') 14A 25.0 25.2 110/2" 100+ 26 27 15A 27.0 29.0 4 54 28 29 16A 29.0 31.0 8 55 18

30

31

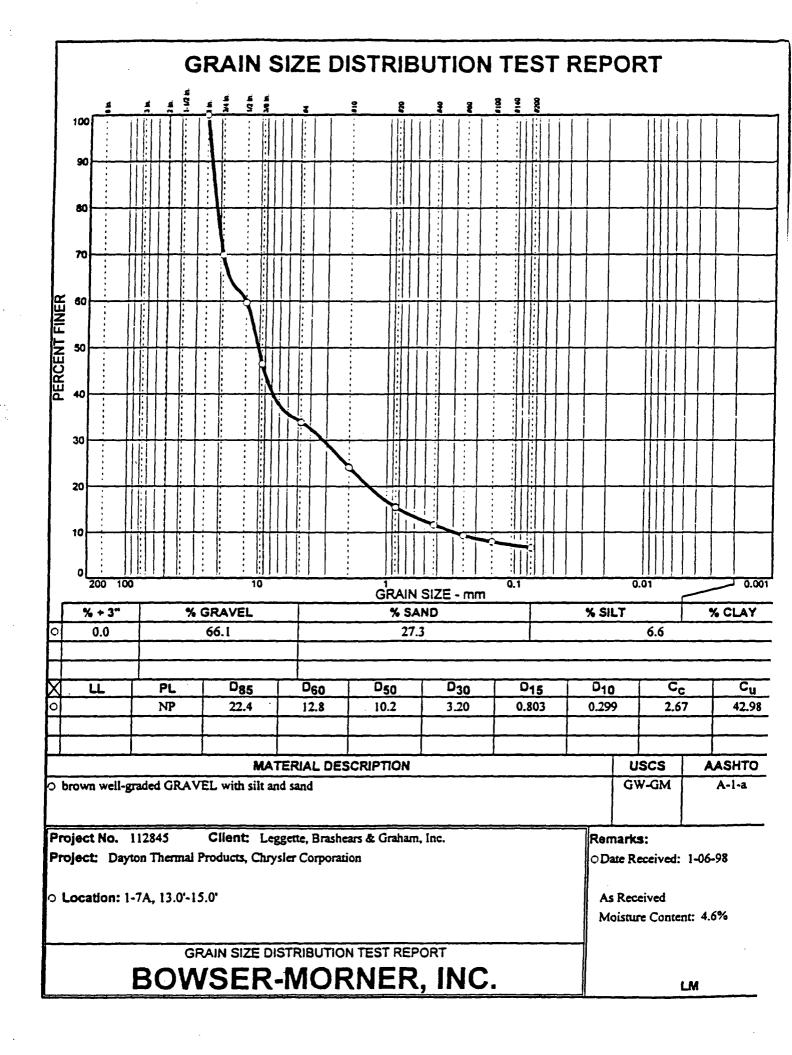
37

40

31.0

Bottom of Boring at 31.0'

DEPTH DATE A-SPLIT SPOON 23.0 又 12/12/97 GROUND INITIAL B-ROCK CORE WATER 23.0 ¥ 12/12/97 AT COMPLETION C-SHELBY TUBE OBSERVATIONS OTHER N/A ¥ N/A D-OTHER



#### GRAIN SIZE DISTRIBUTION TEST DATA

Client: Leggette, Brashears & Graham, Inc.

Troject: Dayton Thermal Products, Chrysler Corporation

roject Number: 112845

#### Sample Data

Lource: 112845 Leggette, Brashears & Graham, Inc.

Sample No.: 1-7A, 13.0'-15.0'

lev. or Depth:

Sample Length (in./cm.):

ocation: 1-7A, 13.0'-15.0'

Description: brown well-graded GRAVEL with silt and sand iquid Limit: NP

'SCS Classification: GW-GM AASHTO Classification: A-1-a

Testing Remarks: Date Received: 1-06-98

As Received

Moisture Content: 4.6%

#### Mechanical Analysis Data

#### Initial

ry sample and tare= 468.41

= 204.52

Dry sample weight = 263.89

!are for cumulative weight retained= .00

| Sieve     | Cumul. Wt. | Percent |
|-----------|------------|---------|
|           | retained   | finer   |
| 1.00 inch | 0.00       | 100.0   |
| .75 inch  | 79.49      | 69.9    |
| .50 inch  | 106.49     | 59.7    |
| .375 inch | 141.15     | 46.5    |
| # 4       | 174.57     | 33.9    |
| # 10      | 200.42     | 24.1    |
| # 20      | 223.32     | 15.4    |
| # 40      | 233.21     | 11.6    |
| # 60      | 239.28     | 9.3     |
| # 100     | 243.05     | 7.9     |
| # 200     | 246.49     | 6.6     |

#### Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200% + 3" = 0.0 % GRAV

**% GRAVEL = 66.1** 

% = 27.3

% FINES = 6.6

D85= 22.43 D60= 12.84 D50= 10.24

 $D_{30} = 3.20$   $D_{15} = 0.80$   $D_{10} = 0.30$ 

 $C_c = 2.6691$   $C_u = 42.9838$ 

## Moisture Content of Soil

**ASTM (D-2216)** 



Client: Leggette, Brashears & Graham, Inc.

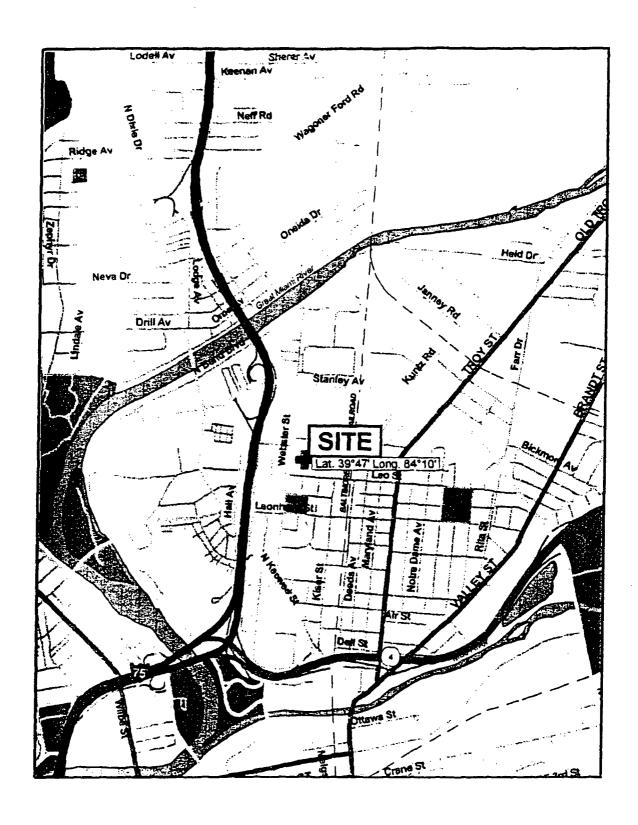
Project: Dayton Thermal Products,

Chrysler Corporation

Work Order No.: 112845

Date: 01/06/98

|          | Committee |             | <del></del> |                       |
|----------|-----------|-------------|-------------|-----------------------|
| Boring   | Sample    | Conth (A)   | Conth (m)   | Maistura Cantant (9/1 |
| Number   | Number    | Depth, (ft) | Depth, (m)  | Moisture Content, (%) |
| 1        | 1 A       | 1.0 - 3.0   | 0.3 - 0.9   | Not Tested            |
| 1        | 2 A       | 3.0 - 5.0   | 0.9 - 1.5   | Not Tested            |
| 1        | 3 A       | 5.0 - 7.0   | 1.5 - 2.1   | 10.0                  |
| 1        | 4 A       | 7.0 - 9.0   | 2.1 - 2.7   | Not Tested            |
| 1        | 5 A       | 9.0 - 11.0  | 2.7 - 3.4   | Not Tested            |
| 1        | 6 A       | 11.0 - 13.0 | 3.4 - 4.0   | 5.1                   |
| 1        | 7 A       | 13.0 - 15.0 | 4.0 - 4.6   | 4.6                   |
| 1        | 8 A       | 15.0 - 17.0 | 4.6 - 5.2   | Not Tested            |
| 1        | 9 A       | 17.0 - 19.0 | 5.2 - 5.8   | 3.2                   |
| 1        | 10 A      | 19.0 - 21.0 | 5.8 - 6.4   | Not Tested            |
| 1        | 11 A      | 21.0 - 23.0 | 6.4 - 7.0   | Not Tested            |
| 1        | 12 A      | 23.0 - 25.0 | 7.0 - 7.6   | 4.7                   |
| 1        | 13 A      | 25.0 - 27.0 | 7.6 - 8.2   | Not Tested            |
| 1        | 14 A      | 27.0 - 29.0 | 8.2 - 8.8   | Not Tested            |
| 1        | 15 A      | 29.0 - 31.0 | 8.8 - 9.4   | Not Tested            |
| 2        | 1 A       | 1.0 - 3.0   | 0.3 - 0.9   | Not Tested            |
| 2        | 2 A       | 3.0 - 5.0   | 0.9 - 1.5   | 16.6                  |
| 2        | 3 A       | 5.0 - 7.0   | 1.5 - 2.1   | Not Tested            |
| 2        | 4 A       | 9.0 - 11.0  | 2.7 - 3.4   | 4.0                   |
| 2        | 5 A       | 11.0 - 13.0 | 3.4 - 4.0   | Not Tested            |
| 2        | 6 A       | 13.0 - 15.0 | 4.0 - 4.6   | 4.7                   |
| 2        | ,7 A      | 15.0 - 17.0 | 4.6 - 5.2   | Not Tested            |
| <b>3</b> | 1 A       | 1.0 - 3.0   | 0.3 - 0.9   | 14.8                  |
| ` 3      | 2 A       | 3.0 - 5.0   | 0.9 - 1.5   | Not Tested            |
| 3        | 3 A       | 5.0 - 7.0   | 1.5 - 2.1   | Not Tested            |
| 3        | 4 A       | 7.0 - 13.0  | 2.1 - 4.0   | 3.5                   |
| 3        | 5 A       | 13.0 - 15.0 | 4.0 - 4.6   | Not Tested            |
| 3        | 6 A       | 15.0 - 17.0 | 4.6 - 5.2   | Not Tested            |
| 3        | 7 A       | 17.0 - 21.0 | 5.2 - 6.4   | 3.4                   |
| 3        | 8 A       | 21.0 - 23.0 | 6.4 - 7.0   | Not Tested            |
| 3        | 9 A       | 23.0 - 25.0 | 7.0 - 7.6   | 3.6                   |
| 3        | 10 A      | 25.0 - 27.0 | 7.6 - 8.2   | Not Tested            |
| 3        | 11 A      | 27.0 - 29.0 | 8.2 - 8.8   | Not Tested            |
| 3        | 12 A      | 29.0 - 31.0 | 8.8 - 9.4   | Not Tested            |
|          |           |             |             |                       |



### VICINITY MAP

[7]

SOIL STUDY FOR A PRESS PIT FOUNDATION, CHRYSLER CORP., DAYTON THERMAL PRODUCTS, WEBSTER STREET, DAYTON, OHIO LIENT: LEGGETE BRASHEARS & GRAHAM, INC.

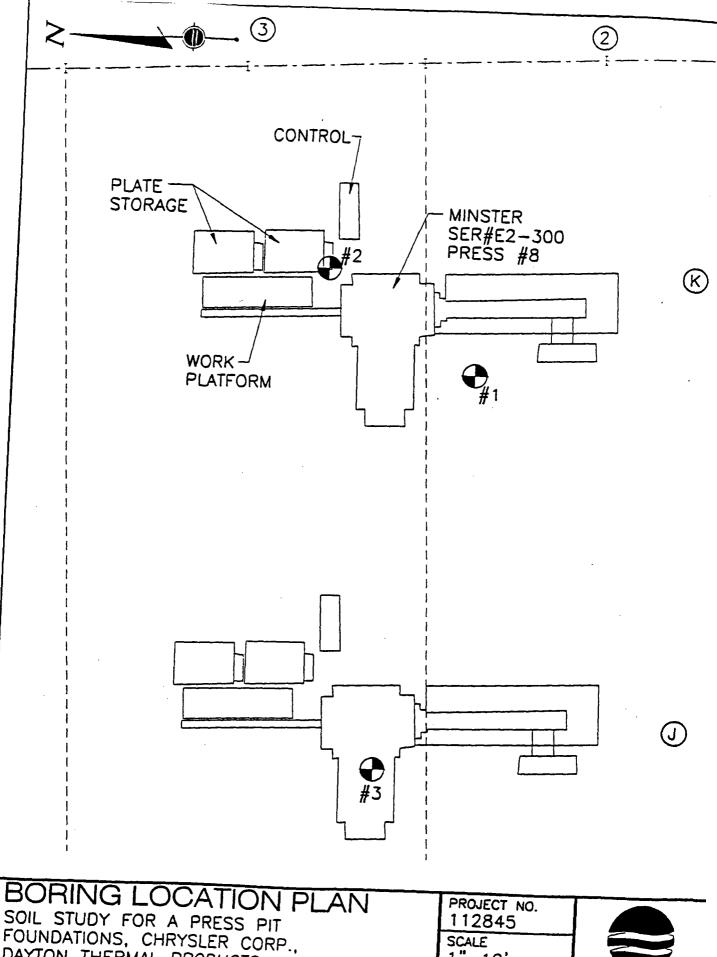
112845 SCALE 1:25000

PROJECT NO.

FIGURE NO.

<u>1-</u>98/HGW



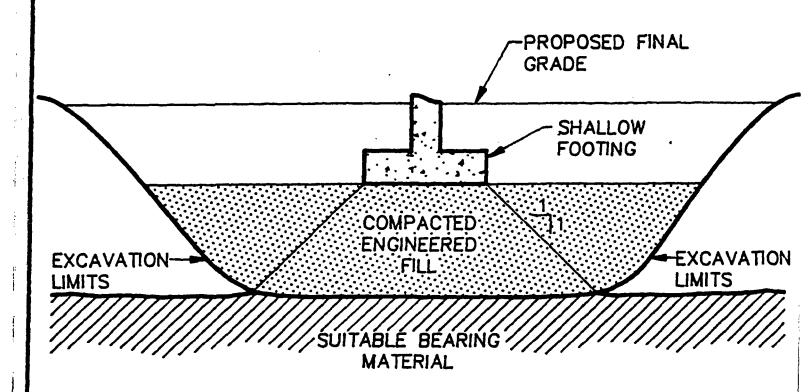


FOUNDATIONS, CHRYSLER CORP., DAYTON THERMAL PRODUCTS, WEBSTER STREET, DAYTON, OHIO CLIENT: LEGGETTE BRASHEARS & GRAHAM, INC.

1-98/HGW

1"=10 FIGURE NO. 2





DESIGN ILLUSTRATION
SHALLOW FOOTINGS IN AN
UNDERCUT AREA

SCALE NONE FIGURE NO.



## PROJECT STATUS UPDATE Number 1 June 5, 1998

TO:

Gary Stanczuk, Chrysler PP&R

Lynn Buhl, Chrysler Legal Carolyn Carlson, DTP Joe Whitlock, DTP Dave Ramsey, DTP Mark Autio, DTP Dick Beck, DTP Fred McCarty, DTP

FROM:

Ken Vogel, Leggette, Brashears & Graham, Inc. (LBG) メシゾ

SUBJECT: Dayton Thermal Products Plant Environmental Project

I would like to take this opportunity to thank everyone for attending the very productive informational meeting held at the Dayton Thermal Products (DTP) plant on May 27, 1998. Key components for the successful resolution of identified soil and ground-water issues at DTP were identified: joint cooperation, coordination, and communication between LBG, PP&R, and DTP personnel. It is our goal to successfully address environmental issues without disruption to plant production, operations, or employees.

A schedule for the projected environmental activities is attached and a summary of key meeting issues and related information is summarized below:

| Contact   | DTP            | PP&R           | LBG            |
|-----------|----------------|----------------|----------------|
| Primary   | Joe Whitlock   | Gary Stanczuk  | Ken Vogel      |
|           | (937) 224-2467 | (248) 576-7365 | (612) 490-1405 |
| Secondary | Dave Ramsey    | Greg Rose      | Kristin Yahnke |
|           | (937) 224-2501 | (248) 576-7362 | (612) 490-1405 |

 Soil-Vapor Extraction (SVE) well drilling in Building 40B began on Monday, June 1, 1998 and was completed on Thursday, June 4. Mr. Kai Hansen was LBG's on-site representative.

- Carlo Environmental (Carlo) will move and/or dispose of excavated soils resulting from press foundation installation work this week.
- Silicate line construction is anticipated to begin during the 4th quarter of 1998. It
  was agreed that SVE remediation of the planned construction area must be
  expedited in order to meet the plant's construction schedule, including preconstruction site preparation activities which may occur as early as
  September/October time frame.

#### **ACTION ITEMS**

#### **Dayton Thermal Products Plant**

- The plant will review/comment/approve final SVE well locations by Monday, June 1, 1998 with confirmation to Ken Vogel or Kai Hansen (communicated to LBG on May 29, 1998 that at least four locations are cleared for Monday's drilling).
- The plant will provide the dimensions of the Building 40B column-support footings to LBG (communicated to LBG on May 29, 1998 that dimensions are unknown).
- The plant will review/approve a long-term location for LBG's field trailer (communicated to LBG on May 29, 1998 that current location is approved).
- Joe Whitlock will forward waste characterization letter to Carlo (communicated to LBG on May 29, 1998 that letter was transmitted to Carlo).
- Joe Whitlock will investigate off-site passive soil gas sampling with the city of Dayton contacts (communicated to LBG on May 29, 1998 that the city has been contacted and is considering how issue will be addressed).
- The plant will consider LBG's preferred location (south of Building 40B) for the SVE treatment/blower skid (discussed with Whitlock and Neargarder on May 29, 1998).
- The plant will review/comment/approve LBG's proposed SVE piping layout (communicated to LBG on May 29, 1998 that piping may be run along I-beams of Building 40B; manner of exit piping to be determined based on final location of skid).
- The plant will communicate any preferred concrete and related specifications for Building 40B flooring and south parking lot, should entry be required for sewer line clean out.

#### Leggette, Brashears & Graham, Inc.

- LBG will confirm anticipated SVE blower sound levels; we do not believe sound levels will be prohibitive. Confirmation will be communicated to Whitlock.
- LBG will finalize SVE system design based on plant comments and Stanczuk approval (submission to Stanczuk and Whitlock).
- LBG will submit final cost estimate to Stanczuk (submitted on June 4).
- LBG will prepare and transmit periodic project updates to the distribution list, and will be responsible for communication and coordination of all project-related issues.
- LBG will be responsible for bidding, contracting, and supervising SVE equipment procurement and installation by qualified, union contractors, subject to the review and approval of PP&R, and the plant when appropriate.
- LBG will be responsible for bidding, contracting and supervision of sewer line clean-out activities, subject to review, comment, and approval by PP&R and the plant.
- LBG will coordinate the disposal of drummed soil cuttings from well drilling activities.
- LBG (and possibly Whitlock) will meet with Dayton city environmental personnel and OEPA DERR (Dayton office) personnel to discuss regional background environmental information and project-related logistical issues such as drilling permits, right-of-way permits; etc. A tentative meeting date is June 18.

#### Chrysler PP&R

- Stanczuk will coordinate release of Belvidere plant's SVE blower and skid unit (completed on May 29, 1998, LBG shipped to skid manufacturer on June 2, 1998).
- Chrysler PP&R will coordinate and track air permit exemption request submittal and approval through OEPA (confirmation of approval to Vogel).
- Chrysler PP&R will review and approve funding requests.
- Chrysler PP&R, along with Chrysler Legal, will be involved in determining meeting dates, agendas, etc. for meetings with third parties.

#### COMMUNICATION/DISTRIBUTION LIST

#### Gary Stanczuk - Remediation Specialist

Chrysler Corporation
Pollution Prevention and Remediation
Chrysler Technology Center
CIMS 482-00-51
800 Chrysler Drive
Auburn Hills, MI 48326-2757
(248) 576-7365 (Tie Line 776-7365)
(248) 576-7369 FAX

#### Greg Rose - Manager

Chrysler Corporation Pollution, Prevention and Remediation Chrysler Technology Center CIMS 482-00-51 Auburn Hills, MI 48326-2757 (248) 576-7362 (Tie Line 576-7362) (248) 576-7369 FAX

#### Ken Vogel, Associate

Leggette, Brashears & Graham, Inc. 1210 West County Road E, Suite 700 St. Paul, MN 55112 (612) 490-1405 (612) 490-1006 FAX (888) 758-1886 pager email - kvogel@lbgmn.com

#### Kristin Yahnke, Engineer

Leggette, Brashears & Graham, Inc. 1210 West County Road E, Suite 700 St. Paul, MN 55112 (612) 490-1405

#### Lynn Buhl, Attorney

Chrysler Corporation
Office of General Counsel
Chrysler Technology Center
CIMS 485-13-65
800 Chrysler Drive
Auburn Hills, MI 48326-2757
(248) 512-4116 (Tie Line 722-4116)
(248) 512-0926 FAX

#### KV:kw

Attachment S:\TECH\3CHRY\DAYTON\FINALDOC\\$TATI.MEM

#### Carolyn Carlson, Plant Manager

Dayton Thermal Products Plant CIMS 478-05-00 1600 Webster Street Dayton, Ohio 45404-1205 (937) 224-2500 (Tie Line 848-2500) (937) 224-2906 FAX

#### Joe Whitlock, Environmental Coordinator

Dayton Thermal Products Plant (937) 224-2467 (Tie Line 848-2467) (937) 224-2915 FAX (888) 572-5036 pager

#### Dave Ramsey, Production Manager

Dayton Thermal Products Plant (937) 224-2501 (Tie Line 848-2501) (937) 224-2906 FAX

#### Mark Autio, Mfg Engineering Mgr.

Dayton Thermal Products Plant (937) 224-2565 (Tie Line 848-2565) (937) 224-2915 FAX

#### Dick Beck, Chief Tool Engineer

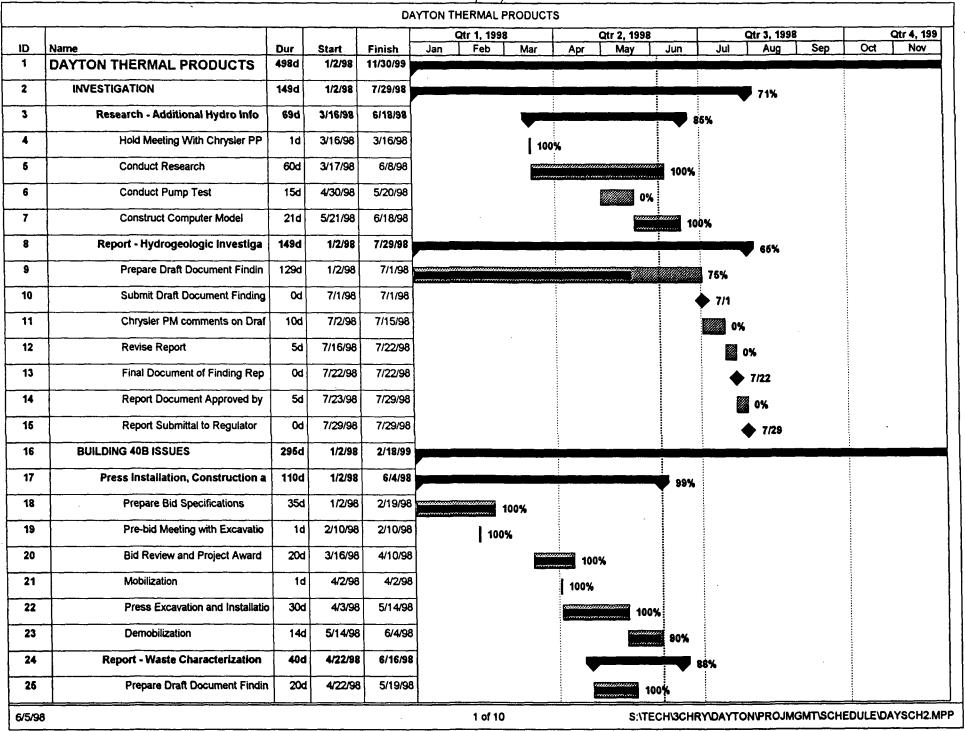
Dayton Thermal Products Plant (937) 224-2473 (Tie Line 848-2473) (937) 224-2915 FAX email - rgb9@chrysler.com

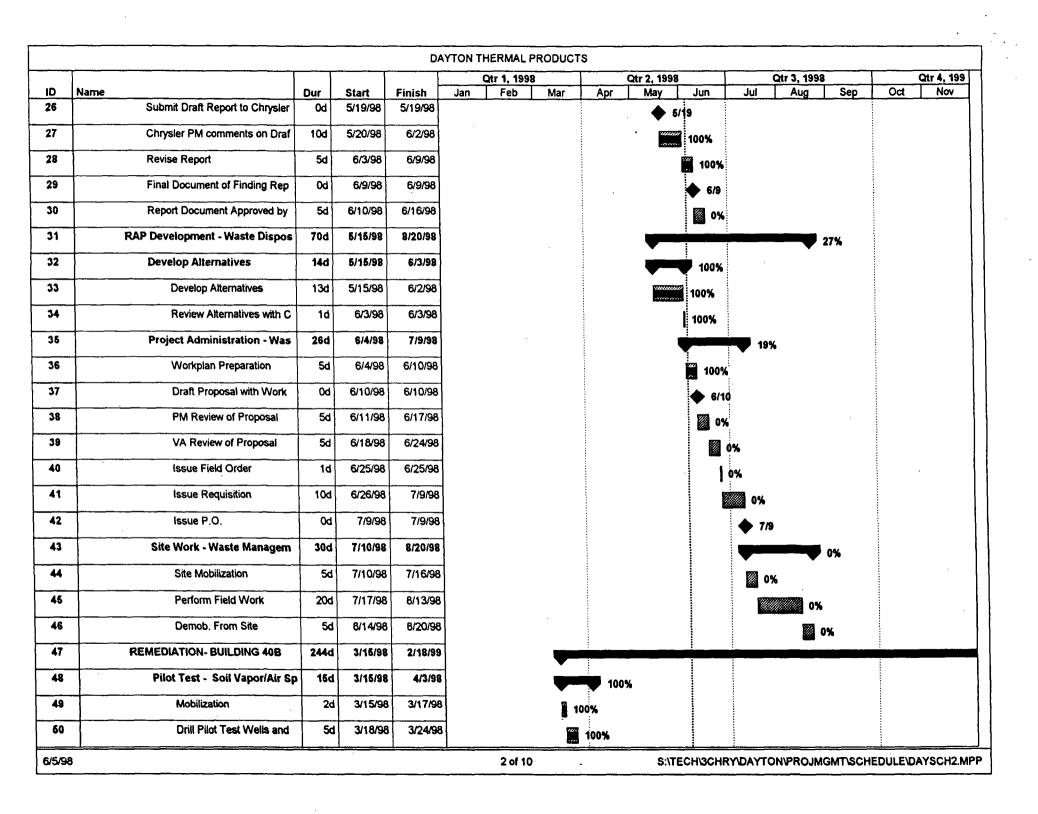
## Marvin Neargarder, Plant Engineer

Dayton Thermal Products Plant (937) 224-2485 (Tie Line 848-2485) (937) 224-2915 FAX

#### Fred McCarty, Plant HR Manager

Dayton Thermal Products Plant (937) 224-2305 (Tie Line 848-2305) (937) 224-2447 FAX As of 6/5/98





#### DAYTON THERMAL PRODUCTS Qtr 3, 1998 Qtr 4, 199 Qtr 1, 1998 Qtr 2, 1998 Aug Sep Oct Nov Feb May Jun ID Name Dur Start Finish Jan Mar Apr 7d 51 Conduct Pilot Testing 3/25/98 4/2/98 100% 52 Demobilization 1d 4/3/98 4/3/98 100% 53 Report - Soil-Vapor Extractio 67d 4/6/98 7/7/98 Prepare Draft Document F 51d 4/6/98 6/15/98 54 55 Submit Draft Report to Ch 1d 6/16/98 6/16/98 0% 56 Chrysler PM comments on 5d 6/17/98 6/23/98 57 **5d** 6/24/98 6/30/98 Revise Report Od 6/30/98 58 Final Document of Finding 6/30/98 59 Report Document Approve 5d 7/1/98 7/7/98 60 Report Submittal to Regul Od! 7/7/98 7/7/98 61 SVE **Project Administration - Buil** 13d 6/1/98 6/17/98 62 Workplan Preparation 4d 6/1/98 6/4/98 100% 63 0d 6/4/98 6/4/98 Draft Proposal with Work 64 PM Review of Proposal 2d 6/5/98 6/8/98 50% 65 VA Review of Proposal 2d 6/9/98 6/10/98 66 Issue Field Order 6/10/98 6/10/98 0d 67 Issue Requisition **5d** 6/11/98 6/17/98 Issue P.O. 0d 6/17/98 6/17/98 68 SVE Remediation System Design 69 25d 5/19/98 6/22/98 6/15/98 70 Prepare Plans and Specifi 20d 5/19/98 Submit Plans and Specs t 6/15/98 6/15/98 71 0d 72 Chrysler Review **2d** 6/16/98 6/17/98 73 Revise Plans and Specific 2d 6/18/98 6/19/98 74 Submit Final Design Pack 0d 6/19/98 6/19/98 75 Final Design Approved by 1d 6/22/98 6/22/98 S:\TECH\3CHRY\DAYTON\PROJMGMT\SCHEDULE\DAYSCH2.MPP 6/5/98 3 of 10

|     |                                       |      |         |          |          | Qtr 1, 19 | 98 |    |   | atr 2, 1998 | }           |          | Qtr 3, 199 | )8  |     | Qtr 4, 199 |
|-----|---------------------------------------|------|---------|----------|----------|-----------|----|----|---|-------------|-------------|----------|------------|-----|-----|------------|
| D _ | Name                                  | Dur  | Start   | Finish   | Jan      | Feb       | Ma | Ap | _ | May         | Jun         | Jul      | Aug        | Sep | Oct | Nov        |
| 76  | Pre-Mobilization Activities           | 12d  | 6/15/98 | 6/30/98  |          |           |    |    |   |             |             | 0%       |            |     |     |            |
| 77  | Contractor Bidding Proces             | 5d   | 6/15/98 | 6/19/98  |          |           |    |    |   |             | 01          | •        |            |     |     |            |
| 78  | Evaluate Bids                         | 3d   | 6/22/98 | 6/24/98  |          |           |    |    |   |             |             | <b>%</b> |            |     |     |            |
| 79  | Sub-Contract with Contrac             | 4d   | 6/25/98 | 6/30/98  |          |           |    |    |   |             |             | 0%       |            |     |     |            |
| 80  | Site Work/Install Remediatio          | 50d  | 6/2/98  | 8/10/98  |          |           |    |    |   | ŧ           | <b>-</b>    | :        | 23         | %   |     |            |
| 81  | Equipment Procurement                 | 35d  | 6/2/98  | 7/20/98  |          |           |    |    |   |             |             | 2        | 5%         |     |     |            |
| 82  | Site Mobilization                     | 1d   | 6/22/98 | 6/22/98  |          |           |    |    |   |             | 10          | 1%       |            |     |     |            |
| 83  | Perform Field Work                    | 30d  | 6/23/98 | 8/3/98   |          |           |    |    |   |             |             |          | 25%        |     |     |            |
| 84  | Demob. From Site                      | 5d   | 8/4/98  | 8/10/98  |          |           |    |    |   |             |             |          | 0%         |     | ·   |            |
| 85  | Site Work/Plant O & M                 | 138d | 8/11/98 | 2/18/99  |          |           |    |    |   |             |             |          |            |     |     |            |
| 86  | Plant O & M                           | 138d | 8/11/98 | 2/18/99  |          |           |    |    |   |             |             |          |            |     |     |            |
| 87  | Project Administration - Sewer Cleano | 29d  | 6/1/98  | 7/9/98   | ·        |           |    |    |   | ·           | <b>y-</b>   | 16       | %          |     |     |            |
| 88  | Workplan Preparation                  | 10d  | 6/1/98  | 6/12/98  | }        |           |    |    |   |             | 45%         | 1        |            |     |     |            |
| 89  | Draft Proposal with Work Plan to Ch   | 0d   | 6/12/98 | 6/12/98  | ]        |           |    |    |   |             | <b>♦</b> 6/ | 12       |            |     |     |            |
| 90  | PM Review of Proposal                 | 2d   | 6/15/98 | 6/16/98  |          |           |    |    |   |             | 01          | 6        |            |     |     | •          |
| 91  | VA Review of Proposal                 | 2d   | 6/17/98 | 6/18/98  |          |           |    |    |   |             | 10          | <b>%</b> |            |     |     |            |
| 92  | Issue Field Order                     | 2d   | 6/19/98 | 6/22/98  | ]        |           |    |    |   |             | 1           | 0%       |            |     |     |            |
| 93  | Issue Requisition                     | 10d  | 6/23/98 | 7/6/98   |          |           |    |    |   |             |             | 0%       |            |     |     |            |
| 94  | Issue P.O.                            | 3d   | 7/7/98  | 7/9/98   |          |           |    |    |   |             |             | 0%       |            |     |     |            |
| 95  | Sewer and Oil Separator Cleaning      | 20d  | 6/4/98  | 7/1/98   | <u> </u> |           |    |    |   |             |             | 8%       |            |     |     |            |
| 96  | Prepare Plans and Specifications      | 15d  | 6/4/98  | <u> </u> | ]        |           |    |    |   |             |             | 10%      |            |     |     |            |
| 97  | Submit Plans and Specs to Chrysler    | Od   | 6/24/98 | 6/24/98  | <u>'</u> |           |    |    |   |             | •           | 6/24     |            |     |     |            |
| 98  | Chrysler Review                       | 2d   | 6/25/98 | 6/26/98  |          |           |    |    |   |             |             | 0%       |            |     |     |            |
| 99  | Revise Plans and Specifications       | 2d   | 6/29/98 | <u> </u> | _        |           |    |    |   |             |             | 0%       |            |     |     |            |
| 100 | Submit Final Design Package to Chr    | 0d   | 6/30/98 | 6/30/98  | 3        |           |    |    |   |             |             | 6/30     |            |     |     |            |

|     |                                   |      |          |          |     |            | PRODUCT |     |             |     |     |            |           |          |            |
|-----|-----------------------------------|------|----------|----------|-----|------------|---------|-----|-------------|-----|-----|------------|-----------|----------|------------|
|     |                                   |      |          |          |     | Qtr 1, 199 |         |     | Qtr 2, 1998 | 3   |     | Qtr 3, 199 |           |          | Qtr 4, 199 |
| 1D  | Name                              | Dur  | Start    | Finish   | Jan | Feb        | Mar     | Apr | May         | Jun | Jul | Aug        | Sep       | Oct      | Nov        |
| 101 | Final Design Approved by Chrysler | 1d   | 7/1/98   | 7/1/98   |     |            |         |     |             |     | 0%  |            |           |          |            |
| 102 | Pre-Mobilization Activities       | 21d  | 6/15/98  | 7/13/98  |     |            |         |     |             |     | 0%  | •          |           |          |            |
| 103 | Contractor Bidding Process        | 10d  | 6/15/98  | 6/26/98  |     |            | į       |     |             |     | 0%  |            |           |          |            |
| 104 | Evaluate Bids                     | 3d   | 6/29/98  | 7/1/98   |     |            |         |     |             |     | 0%  |            |           |          |            |
| 105 | Sub-Contract with Contractor      | 2d   | 7/10/98  | 7/13/98  |     |            |         |     |             |     | 0%  |            |           |          |            |
| 106 | Site Work/Sewer Cleaning          | 36d  | 7/14/98  | 9/1/98   |     |            |         |     |             |     | -   |            | <b>0%</b> |          |            |
| 107 | Site Mobilization                 | 1d   | 7/14/98  | 7/14/98  |     |            |         |     |             |     | 0%  |            |           |          |            |
| 108 | Perform Field Work                | 30d  | 7/15/98  | 8/25/98  |     |            |         |     |             |     |     |            | 0%        |          |            |
| 109 | Demob. From Site                  | 5d   | 8/26/98  | 9/1/98   |     |            |         |     |             |     | `   |            | 0%        |          |            |
| 110 | REMEDIATION - GROUND-WATER CO     | 337d | 8/17/98  | 11/30/99 |     |            |         |     |             |     |     |            |           |          |            |
| 111 | Project Administration - Ground-  | 31d  | 8/17/98  | 9/28/98  |     |            |         |     |             |     |     |            |           | 0%       |            |
| 112 | Workplan Preparation              | 5d   | 8/17/98  | 8/21/98  |     |            |         |     |             |     |     |            | )%        |          |            |
| 113 | Draft Proposal with Work Plan t   | Od   | 8/21/98  | 8/21/98  |     |            |         |     |             |     |     | <b>•</b>   | 8/21      |          |            |
| 114 | PM Review of Proposal             | 5d   | 8/24/98  | 8/28/98  |     |            |         |     |             |     |     |            | 0%        |          |            |
| 116 | VA Review of Proposal             | 5d   | 8/31/98  | 9/4/98   |     |            |         |     |             |     |     |            | 0%        |          |            |
| 116 | Issue Field Order                 | 1d   | 9/7/98   | 9/7/98   |     |            |         |     |             |     |     |            | 0%        |          |            |
| 117 | Issue Requisition                 | 10d  | 9/8/98   | 9/21/98  | ]   |            |         |     |             |     |     |            | 0         | <b>%</b> |            |
| 118 | Issue P.O.                        | Od   | 9/28/98  | 9/28/98  |     |            |         |     |             |     |     |            | •         | 9/28     |            |
| 119 | RAP Development - Ground-Wate     | 100d | 9/8/98   | 1/25/99  | 1   |            |         |     |             |     |     |            |           |          |            |
| 120 | Develop Alternatives              | 15d  | 9/8/98   | 9/28/98  | 1   |            |         |     |             |     |     |            |           | 0%       |            |
| 121 | Develop Alternatives              | 10d  | 9/8/98   | 9/21/98  | ]   |            |         |     |             |     |     |            | 0         | <b>%</b> |            |
| 122 | Review Alternatives with C        | 5d   | 9/22/98  | 9/28/98  |     |            |         |     |             |     |     |            |           | 0%       |            |
| 123 | RAP Approved by Chrysler          | 85d  | 9/29/98  | 1/25/99  | 1   |            |         |     |             |     |     |            | •         | <u>:</u> |            |
| 124 | Prepare Draft RAP                 | 20d  | 9/29/98  | 10/26/98 |     |            |         |     |             |     |     |            |           |          | 0%         |
| 125 | Submit Draft RAP to Chry          | Od   | 10/26/98 | 10/26/98 | ]   |            |         |     |             |     |     |            |           | •        | 10/26      |

|     | }                                | 1   |          | . \      |     | Qtr 1, 19 | 98  |     | Qtr 2, 1998 |     |     | Qtr 3, 1998 |     |     | Qtr 4, 199 |
|-----|----------------------------------|-----|----------|----------|-----|-----------|-----|-----|-------------|-----|-----|-------------|-----|-----|------------|
| ID  | Name                             | Dur | Start    | Finish   | Jan | Feb       | Mar | Apr | May         | Jun | Jul | Aug         | Sep | Oct | Nov        |
| 126 | Chrysler PM Review               | 10d | 10/27/98 | 11/9/98  |     |           |     |     |             |     |     |             |     |     | 0%         |
| 127 | Revise RAP                       | 10d | 11/10/98 | 11/23/98 |     |           |     |     |             |     |     |             |     |     |            |
| 128 | Submit Final RAP to Chry         | DO  | 11/23/98 | 11/23/98 |     |           |     |     |             |     |     |             |     |     | •          |
| 129 | Final Report Approved By         | 5d  | 11/24/98 | 11/30/98 |     |           |     |     |             |     |     |             |     |     |            |
| 130 | Report Submittal to Regul        | 0d  | 11/30/98 | 11/30/98 |     |           |     |     |             |     |     |             |     |     | •          |
| 131 | Regulatory Review/Approv         | 20d | 12/29/98 | 1/25/99  |     |           |     |     |             |     |     |             |     |     |            |
| 132 | Remediation System Design        | 85d | 1/26/99  | 5/24/99  |     |           |     |     |             |     |     |             |     |     |            |
| 133 | Prepare Plans and Specificatio   | 20d | 1/26/99  | 2/22/99  |     |           |     |     |             |     |     |             |     |     |            |
| 134 | Chrysler Review                  | 10d | 2/23/99  | 3/8/99   |     |           |     |     |             |     |     |             |     |     |            |
| 135 | Revise Plans and Specification   | 10d | 3/9/99   | 3/22/99  |     |           |     |     |             |     |     |             |     |     |            |
| 136 | Submit Final Design Package t    | 0d  | 3/22/99  | 3/22/99  |     |           |     |     |             |     |     |             |     |     |            |
| 137 | Final Design Approved by Chry    | 5d  | 3/23/99  | 3/29/99  |     |           |     |     |             |     |     |             |     |     |            |
| 138 | Design Submittal to Regulator    | 0d  | 3/29/99  | 3/29/99  |     |           |     |     |             |     |     | •           |     |     |            |
| 139 | Regulatory Review/Approval       | 20d | 4/27/99  | 5/24/99  | 1   |           |     |     |             |     |     |             |     |     |            |
| 140 | Pre-Mobilization Activities      | 25d | 5/25/99  | 6/28/99  | }   |           |     |     |             | ,   |     |             |     |     |            |
| 141 | Contractor Bidding Process       | 10d | 5/25/99  | 6/7/99   | 1   |           |     |     |             |     |     |             |     |     |            |
| 142 | Evaluate Bids                    | 5d  | 6/8/99   | 6/14/99  | 1   |           |     |     |             |     |     |             |     |     |            |
| 143 | Sub-Contract with Contractor     | 10d | 6/15/99  | 6/28/99  |     |           | ,   |     |             |     |     |             |     |     |            |
| 144 | Project Administration - Ground- | 31d | 6/29/99  | 8/10/99  |     |           |     |     |             |     |     |             |     |     |            |
| 145 | Workplan Preparation             | 5d  | 6/29/99  | 7/5/99   | 1   |           |     |     |             |     |     |             |     |     |            |
| 146 | Draft Proposal with Work Plan t  | 0d  | 7/5/99   | 7/5/99   |     |           |     |     |             |     |     |             |     |     |            |
| 147 | PM Review of Proposal            | 5d  | 7/6/99   | 7/12/99  | 1   |           |     |     |             |     |     |             |     |     |            |
| 148 | VA Review of Proposal            | 5d  | 7/13/99  | 7/19/99  | 1   |           |     |     |             |     |     |             |     |     |            |
| 149 | Issue Field Order                | 1d  | 7/20/99  | 7/20/99  |     |           |     |     |             |     |     |             |     |     |            |
| 150 | Issue Requisition                | 10d | 7/21/99  | 8/3/99   | 7   |           |     |     |             |     |     |             |     |     |            |

| DA      | AYTON TI |             |     |     |             |     |     |             |   |
|---------|----------|-------------|-----|-----|-------------|-----|-----|-------------|---|
|         |          | Qtr 1, 1991 | В   | Γ   | Qtr 2, 1998 | 3   |     | Qtr 3, 1998 | 3 |
| Finish  | Jan      | Feb         | Mar | Apr | May         | Jun | Jul | Aug         | Ι |
| 8/10/99 |          |             |     | :   |             |     |     |             |   |

...

Dur

Od

80d

30d

5d

40d

Start

8/10/99

8/11/99

8/11/99

9/22/99

9/29/99

11/24/99

11/30/99

9/21/99

9/28/99

11/23/99

11/30/99

ID

151

152

153

154

155

156

Name

Issue P.O.

Site Work/Install Ground-Water C

**Equipment Procurement** 

Site Mobilization

Perform Field Work

Demob. From Site

Qtr 4, 199

Nov

Oct

Sep

|        |          |             |     |          |           |     | DAYTON THERMAL PRODUCTS |            |             |     |             |     |          |             |     |          |             |                |      |
|--------|----------|-------------|-----|----------|-----------|-----|-------------------------|------------|-------------|-----|-------------|-----|----------|-------------|-----|----------|-------------|----------------|------|
|        |          | Qtr 1, 1999 |     |          | Qtr 2, 19 | 99  | ſ                       | Qtr 3, 199 | 9           |     | Qtr 4, 1999 | )   |          | Qtr 1, 2000 |     | <u> </u> | Qtr 2, 2000 | )              |      |
| Dec    | Jan      | Feb         | Mar | Apr      | May       | Jun | Jul                     | Aug        | Sep         | Oct | Nov         | Dec | Jan      | Feb         | Mar | Apr      | May         | Jun            | 1    |
| بحبيد  |          |             |     |          |           |     |                         |            |             |     |             | 29% |          |             |     |          |             | · <del>-</del> | 1    |
|        |          |             |     |          |           |     |                         |            | •           |     | •           |     |          |             |     |          |             |                | 1    |
|        |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                | 1    |
|        |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                | 1    |
|        |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                | -    |
| ı      |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                |      |
|        |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                |      |
|        |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                |      |
|        |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                | İ    |
|        |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                |      |
|        |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                |      |
| 1      |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                |      |
| Į      |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                | Ì    |
|        |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                | -    |
|        |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                | 1    |
|        |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                |      |
|        |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                | - [  |
|        | :        |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                |      |
|        |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                | ļ    |
|        |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                | 1    |
| (      |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                | -    |
| į.     | :        |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                |      |
| l      |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                |      |
|        |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                |      |
| ł      |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             | •              | 1    |
|        |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                |      |
|        |          | •           |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                | }    |
|        |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                | ŀ    |
| }      |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                | 1    |
| [      |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                |      |
| 1      |          |             |     |          | •         |     |                         |            |             |     |             |     |          |             |     |          |             |                | 1    |
|        |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                |      |
|        |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                | 1    |
|        |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                |      |
| 1      |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                | -    |
| 1      |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                | -    |
| 1      |          |             |     |          |           |     |                         | •          |             |     |             |     |          |             |     |          |             |                | 1    |
|        |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                |      |
|        |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                | ]    |
| 1      |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                |      |
|        |          |             |     |          |           |     |                         |            |             |     |             |     |          |             |     |          |             |                |      |
|        | <u> </u> |             |     | <u> </u> |           |     |                         |            | <del></del> |     |             |     |          |             |     |          |             |                |      |
| 6/5/98 |          |             |     |          |           |     |                         |            | 8 of        | 10  |             | 0.  | .TECH136 | CHRYDAYT    |     | MCMTS    | CHEDIII EI  | DAVECH         | 2 MP |

|       |     |            |     |     |             |     |     | DAYTON      | THERMA | L PRODU | стѕ         |     |         |             |        |          |             |          |
|-------|-----|------------|-----|-----|-------------|-----|-----|-------------|--------|---------|-------------|-----|---------|-------------|--------|----------|-------------|----------|
|       |     | Qtr 1, 199 |     |     | Qtr 2, 1999 | •   |     | Qtr 3, 1999 |        |         | Qtr 4, 1999 | 1   |         | Qtr 1, 2000 | )      |          | Qtr 2, 2000 |          |
| Dec   | Jan | Feb        | Mar | Apr | May         | Jun | Jul | Aug         | Sep    | Oct     | Nov         | Dec | Jan     | Feb         | Mar    | Apr      | May         | Jun      |
|       |     |            |     |     |             |     |     |             |        |         |             |     |         |             |        |          |             |          |
|       |     |            |     |     |             |     |     |             |        |         |             |     |         |             |        |          |             |          |
| /5/98 |     |            | 29% |     |             |     |     |             | 9 of   | 10      |             | ·2  | TECH/30 | HRYDAY      | ONVPRO | IMGMT\Si | CHEDULE     | DAYSCH2. |

|        |          |            |     |             |            |     |         | DAYTO       | N THERMA | L PRODU | стѕ         |     |         |             |     |          |             |         |   |
|--------|----------|------------|-----|-------------|------------|-----|---------|-------------|----------|---------|-------------|-----|---------|-------------|-----|----------|-------------|---------|---|
|        |          | Qtr 1, 199 | 9   |             | Qtr 2, 199 | 9   |         | Qtr 3, 199  | 9        |         | Qtr 4, 1999 | )   |         | Qtr 1, 2000 | )   | T        | Qtr 2, 2000 | )       |   |
| Dec    | Jan      | Feb        | Mar | Apr         | May        | Jun | Jul     | Aug         | Sep      | Oct     | Nov         | Dec | Jan     | Feb         | Mar | Apr      | May         | Jun     | 1 |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         | ,           |     |          |             |         |   |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        |          |            |     |             |            |     |         |             |          |         |             | -   |         | ÷           |     |          |             |         |   |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         | İ |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        | :        |            | 0%  |             |            |     |         |             |          |         |             |     | •       |             |     |          |             |         |   |
|        |          |            | 0%  |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        |          | 20,000,000 |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        | i<br>i   |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         | - |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         | Ì |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
|        |          |            |     |             |            |     |         |             |          |         |             |     |         |             |     |          |             |         |   |
| 6/5/98 | <u> </u> |            |     | <del></del> |            | -   | <u></u> | <del></del> | 10 of    | 10      |             |     | TECLINA | HRYDAY      |     | IMCMONO. | CHEDITE     | DAVECHO |   |

|      | DAYTON THERMAL PRODUCTS    Qtr 1, 1999   Qtr 2, 1999   Qtr 3, 1999   Qtr 4, 1999   Qtr 1, 2000   Qtr 2, 2000 |             |     |     |     |     |                     |     |       |     |     |     |     |             |     |     |             |     |
|------|--|-------------|-----|-----|-----|-----|---------------------|-----|-------|-----|-----|-----|-----|-------------|-----|-----|-------------|-----|
|      |  | Qtr 1, 199  |     |     |     |     |                     |     |       |     |     |     |     | Qtr 1, 2000 |     |     | Qtr 2, 2000 | )   |
| Dec  | Jan  | Feb         | Mar | Apr | May | Jun | Jul                 | Aug | Sep   | Oct | Nov | Dec | Jan | Feb         | Mar | Apr | May         | Jun |
|      |  |             |     |     |     |     | - ñ. <sub>'</sub> . |     |       |     |     | •   |     |             |     |     |             |     |
|      |  | <b>)</b> 0% |     |     |     |     |                     |     |       |     |     |     |     |             |     |     |             |     |
| 5/98 |  | <b>P</b> 0% |     |     |     |     |                     |     | 11 of |     |     | ``  |     | CHRYVDAYT   |     |     |             |     |

.

|       |     |            |            |      |            |             |              | DAYTON      | THERMA | L PRODU | стѕ         |            |         |             |        |         |            |         |
|-------|-----|------------|------------|------|------------|-------------|--------------|-------------|--------|---------|-------------|------------|---------|-------------|--------|---------|------------|---------|
| I     |     | Qtr 1, 199 |            |      | Qtr 2, 199 | 9           |              | Qtr 3, 1999 | )      |         | Qtr 4, 1999 | ) <u> </u> |         | Qtr 1, 2000 |        |         | Qtr 2, 200 |         |
| Dec   | Jan | Feb        | Mar        | Apr  | May        | Jun         | Jul          | Aug         | Sep    | Oct     | Nov         | Dec        | Jan     | Feb         | Mar    | Apr     | May        | Jun     |
|       |     |            |            |      |            |             |              |             |        |         |             |            |         |             |        |         |            |         |
| /23   |     |            |            |      |            |             |              |             |        |         |             |            |         |             |        |         |            |         |
| 6     |     |            |            |      |            |             |              |             |        |         |             |            |         |             |        |         |            |         |
| 11/30 |     | 0%         |            |      |            | -           |              |             |        |         |             |            |         |             |        |         | •          |         |
|       | •   |            |            |      |            | <b>P</b> 0% |              |             |        |         |             |            |         |             |        |         |            |         |
|       |     |            | 0%<br>2888 |      |            |             |              |             |        |         |             |            |         |             |        |         |            |         |
|       |     |            | 0%<br>     | %    |            |             |              |             |        |         |             |            |         |             |        |         |            |         |
|       |     |            |            | 3/22 |            |             |              |             |        |         |             |            |         |             |        |         |            |         |
|       |     |            |            |      |            |             |              |             |        |         |             |            |         |             |        |         |            |         |
|       |     |            | •          | 3/29 |            | 0%          |              |             |        |         |             |            |         |             |        |         |            |         |
|       |     |            |            |      | •          |             | 0%           |             |        |         |             |            |         |             |        |         |            |         |
|       |     |            |            |      | -          | 0%          |              |             |        |         |             |            |         |             |        |         |            |         |
|       |     |            |            |      |            | 0%          | 1            |             |        |         |             |            |         |             |        |         |            |         |
|       |     |            |            |      |            |             | 0%           | 0%          | 1      |         |             |            |         |             |        |         |            |         |
|       |     |            |            |      |            |             | 0%           | •           |        |         |             |            |         |             |        |         |            |         |
|       |     |            |            |      |            |             | <b>†</b> 7/5 |             |        |         |             |            |         |             |        |         |            |         |
|       |     |            |            |      |            |             | 0%           |             |        |         |             |            |         |             |        |         |            |         |
|       |     |            |            |      |            |             |              | 0%          |        |         |             |            |         |             |        |         |            |         |
|       |     |            |            |      |            |             | 1            | 0%          |        |         |             |            |         |             |        |         |            |         |
| /5/98 |     |            |            |      |            |             |              |             | 12 of  | 10      |             | S:\        | TECH/3C | HRYDAY      | ONPRO. | JMGMT\S | CHEDULE    | DAYSCH2 |

|     |     | Qtr 1, 1999 |     |     | Qtr 2, 199 | 9   |     | Qtr 3, 1999   |     |          | Qtr 4, 1999 | )   |     | Qtr 1, 200 | 0   |     | Qtr 2, 2000 | )   |
|-----|-----|-------------|-----|-----|------------|-----|-----|---------------|-----|----------|-------------|-----|-----|------------|-----|-----|-------------|-----|
| Dec | Jan | Feb         | Mar | Apr | May        | Jun | Jul | Aug           | Sep | Oct      | Nov         | Dec | Jan | Feb        | Mar | Apr | May         | Jun |
|     |     |             |     |     |            |     |     | <b>♦</b> 8/10 |     |          |             |     |     |            |     |     |             |     |
|     |     |             |     |     |            |     |     |               |     |          |             | 0%  |     |            |     |     |             |     |
|     |     |             |     |     |            |     |     |               | 0   | <b>%</b> |             |     |     |            |     |     |             |     |
|     |     |             |     |     |            |     |     |               |     | 0%       |             |     |     |            |     |     |             |     |
|     |     |             |     |     |            |     | -   |               | . ( |          | 0           | %   |     |            |     |     |             |     |
|     |     | `           |     |     |            |     |     |               |     |          |             | 0%  |     |            |     |     |             |     |





## LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER

1210 WEST COUNTY ROAD E SAINT PAUL, MN 55112

(612) 490-1405 FAX (612) 490-1006

DATE: 6/5/98

PAGES:

(Includes cover page)

TO: Gary Stanczuk

FAX #: (248) 576-7369

COMPANY: Chrysler PP+R TO: Lynn Buhl

FAX #: (248) 512-0926

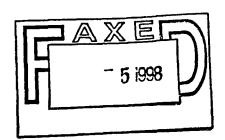
COMPANY: Chrysler Legal

TO: Joe Whitlock -> please distribute FAX #: (937) 224-2915

COMPANY: Chrysler Dayton

FROM: Ken Vogel

RE: Project Status Update #1 and Schedule Dayton Thermal Products



Please contact Kathleen Weinrich (612) 490-1405 if transmission is incomplete or can not be read.



#### **MEMORANDUM**

TO:

Gary Stanczuk

FROM:

Ken Vogel

DATE:

May 26, 1998

**SUBJECT:** 

Outstanding Issues at Dayton Thermal Products

The following issues require decisions, resolution, and/or additional information by LBG, Chrysler PP&R, and/or the plant in order to complete soil remediation in the vicinity of the proposed silicate system:

#### **LBG**

- Finalize SVE Pilot Test Report.
- Finalize SVE System Cost Estimate (with input from plant and PP&R).
- Finalize Sewer Clean Out Specifications (with input from plant and PP&R).
- Bid and Contract for SVE system construction and equipment.
- · Bid and Contract for sewer line clean out.
- Finalize ground-water model particle tracking.
- Contact the City of Dayton regarding Gore Sorber offsite screening survey.
- Install Gore Sorbers and analyze results.

#### Chrysler

- Resolution of final siting location for SVE treatment skid (north, south, or roof?).
- · Receipt of air permit exemption request.
- Resolution of final siting location for LBG field trailer is necessary before we complete electrical and utilities hookup.
- Approval to ship Lamson blower from Belvidere plant to skid manufacturer.
- Schedule and details of silicate line construction, including estimate of excavation dimensions.
- Final field order for SVE system (equipment, installation, O&M).
- Approval of SVE system layout (number and depth of wells, location, piping, etc.).
- Determination of contracting arrangement for sewer line cleanout.

#### **Update on Outstanding Issues:**

Air Permitting - LBG has completed a preliminary air permitting review/submittal for the building 40B SVE soil remediation system. The submittal requests a permit exemption. This package has been transmitted to Chrysler. LBG is awaiting receipt of the exemption from Chrysler or OEPA?

Building 40B SVE System - LBG has finalized the SVE system design for 40B. We have designed for a total of 12 nested SVE wells (shallow and deep) that will essentially cover the footprint of building 40B. If this configuration is not desired, the system can be modified to cover a smaller area. We have completed preliminary labor, material, and equipment cost estimates totaling approximately \$150,000. In addition, one year of O&M will require roughly \$100,000 dependent on off gas treatment requirements. Logistical issues include plant approval of well and equipment siting. Well installation is scheduled to begin the first week in June. We estimate 4 months to remediate the soil in the vicinity of the proposed silicate line construction.

Sewer Line Clean Out - LBG will begin compiling cost estimates for sewer line clean out of the Building 40B ceramic drains located beneath the building. Our original approach was to access the lines through the oil separator located south of the building in the parking lot, but Carlo has since plugged two lines with concrete, the third was filled with dirt. Because of this, it is likely that the lines will need to be accessed using a different entry point. Per analytical results, the liquid in one sewer is classified as a hazardous waste. The solid/semi-solid contents of the other two lines have not been characterized.

Gore-Sorber Soil Screening - LBG has received a quote for 100 Gore Sorber units to be utilized in an offsite soil screening application prior to offsite well installation or soil sampling. The cost is \$17,500. We have not yet contacted the city of Dayton to inquire whether this application will be exempt from permitting requirements. We will do so upon receiving your okay to proceed.

Facility Interview - Per Doug Orf's suggestion, LBG personnel interviewed Mr. Dennis Morrow, Plant Maintenance Superintendent, and toured the site with old plans and drawings to learn as much as possible about potential areas of interest and history of the site. Little additional information was obtained. It is likely that the oil/water separators located along the south plant area are still in place.

Computer Model - The computer ground-water model has been built and calibrated to the extent possible with existing data. Additional offsite well data will be necessary to further refine the model, if desired. Particle tracking analysis is currently being conducted in order to predict contaminant transport. This information will be utilized to increase the efficiency and reduce the costs of offsite investigations, if implemented.

Site Trailer - LBG's field trailer has been delivered to the plant. However outstanding plant issues with regards to the actual final location of the trailer are holding up electrical and phone hookups.

S:\TECH\3CHRY\DAYTON\FINALDOC\ISSUES.MEM

# PROJECT STATUS UPDATE Number 2 June 11, 1998

TO:

Gary Stanczuk, Chrysler PP&R Lynn Buhl, Chrysler Legal Carolyn Carlson, DTP Joe Whitlock, DTP Dave Ramsey, DTP Mark Autio, DTP Dick Beck, DTP

Fred McCarty, DTP

FROM:

Ken Vogel, Leggette, Brashears & Graham, Inc. (LBG)

KRV

**SUBJECT:** 

**Dayton Thermal Products Plant Environmental Project** 

Attached for your immediate review and comment are a potential bidder's list for sewer line cleanout, draft invitation to bid for sewer line cleanout, and proposed SVE skid location plan. A summary of other key project issues and related information is summarized below:

| Contact   | DTP                            | PP&R                            | LBG                              |
|-----------|--------------------------------|---------------------------------|----------------------------------|
| Primary   | Joe Whitlock<br>(937) 224-2467 | Gary Stanczuk<br>(248) 576-7365 | Ken Vogel<br>(612) 490-1405      |
| Secondary | Dave Ramsey (937) 224-2501     | Greg Rose<br>(248) 576-7362     | Kristin Yahnke<br>(612) 490-1405 |

- BFI has indicated to LBG that they will accept drummed soil cuttings and dispose
  of along with excavated soils from Building 40B. PP&R (along with the plant)
  needs to work out the financial details of this scenario, i.e., increase Carlo's P.O.
  to cover the drums or issue a P.O.C. to LBG for the same.
- Silicate line construction is anticipated to begin during the fourth quarter of 1998. A meeting at the plant has been set for June 17 or 18 to discuss this construction and the SVE construction. Topics for discussion include: silicate schedule, placement and excavation details, SVE system layout, SVE treatment building placement, the timing and impacts of sewer line cleanout to SVE system and plant construction, plant specifications for floor concrete and/or parking lot surfacing. It is anticipated that Gary Stanczuk, Ken Vogel, Kristin Yahnke and plant personnel will attend.

information and project-related logistical issues such as drilling permits, right-ofway permits, etc. A tentative meeting date is now scheduled for June 24.

#### Chrysler PP&R

- Chrysler PP&R will determine whether Carlo will include drummed cuttings
  disposal with excavated soils, or LBG. This information is needed as soon as
  possible.
- Chrysler PP&R will coordinate and track air permit exemption request submittal and approval through OEPA (confirmation of approval to Vogel). This information is needed as soon as possible.
- Chrysler PP&R will review LBG's the attached proposed bidder's list and specifications for sewer line cleanout and provide comment, additions, deletions, etc. This review is needed as soon as possible.
- Chrysler PP&R will review and approve funding requests.
- Chrysler PP&R, along with Chrysler Legal, will be involved in determining meeting dates, agendas, etc. for meetings with third parties.

KV:kw
Attachment
s:\Tech3chry\DayTon\finaldoc\stat2.Mem

#### **ACTION ITEMS**

#### **Dayton Thermal Products Plant**

- The plant will communicate any preferred concrete and related specifications for Building 40B flooring and south parking lot, should entry be required for sewer line cleanout. This information is needed as soon as possible.
- The plant will consider LBG's preferred location (south of Building 40B) for the SVE treatment/blower skid (discussed with Whitlock and Neargarder on May 29, 1998). This information is needed as soon as possible.
- The plant will review LBG's proposed bidder's list and specifications for sewer line cleanout and provide comment, additions, deletions, etc. This review is needed as soon as possible.

#### Leggette, Brashears & Graham, Inc.

- LBG will confirm anticipated SVE blower sound levels; we do not believe sound levels will be prohibitive. Confirmation will be communicated to Whitlock.
- LBG will forward a plan showing the proposed location of the SVE skid on the south side of Building 40B. (Long 6/11/98)
- LBG will finalize SVE system design based on plant comments and Stanczuk approval (submission to Stanczuk and Whitlock).
- LBG will prepare and transmit periodic project updates to the distribution list, and will be responsible for communication and coordination of all project-related issues.
- LBG will be responsible for bidding, contracting, and supervising SVE equipment procurement and installation by qualified, union contractors, subject to the review and approval of PP&R, and the plant when appropriate.
- LBG will be responsible for bidding, contracting, and supervision of sewer line clean-out activities, subject to review, comment, and approval by PP&R and the plant. A pre-bid meeting must be held soon, perhaps as early as June 18.
- LBG will coordinate the disposal of drummed soil cuttings from well drilling activities, if so directed by PP&R.
- LBG and PP&R will meet with Dayton city environmental personnel and OEPA DERR (Dayton office) personnel to discuss regional background environmental





PROFESSIONAL GROUND-WATER
AND ENVIRONMENTAL ENGINEERING SERVICES

1210 WEST COUNTY ROAD E SAINT PAUL, MN 55112

(612) 490-1405 FAX (612) 490-1006

DATE: 4/30/98

PAGES: 3
(Includes cover page)

TO: Gary Stanczuk

FAX#: (248)576-7369

COMPANY: Chrysler Corp

TO:

FAX #:

COMPANY:

TO:

FAX #:

COMPANY:

FROM: En Vogel

RE: Summary of Dayton Activities

Gary, I trust this is the info you were looking for. If not, please contact Nike Bratus.

aloka!

Ken

Please contact Kathleen Weinrich (612) 490-1405 if transmission is incomplete or can not be read.

fax

TRANSMITTAL

ALVONO VILLIANCE PO

#### **MEMORANDUM**

TO:

Gary Stanczuk

FROM:

Ken Vogel

DATE:

April 30, 1998

SUBJECT:

Planned Activities Dayton Thermal Products

Per our meeting yesterday, the following activities will be undertaken or are currently underway:

Air Permitting - LBG has completed a preliminary air permitting review/submittal for the building 40B SVE soil remediation system. The submittal requests a permit exemption. This package is being transmitted to you under separate cover for Chrysler's review and comment prior to submittal to Ohio EPA. Should we wait to submit the final package until after Lynn Buehl contacts OEPA? Please advise.

Building 40B SVE System - LBG is finalizing the SVE system design for 40B. We are designing for a total of 8 SVE wells. We should have material and equipment cost estimates by the end of next week. Logistical issues include plant approval of well and equipment siting. Well installation should be underway/completed by the end of May. We estimate 4 months to remediate the soil.

Sewer Line Clean Out - LBG will begin compiling cost estimates for sewer line clean out of the Building 40B ceramic drains located beneath the building. As we discussed, our approach will be to access the lines through the oil separator located south of the building in the parking lot. Of course, the plant will need to be consulted on the timing and methods employed. Per analytical results and our discussions yesterday, the liquid in the sewer is classified as a hazardous waste.

Gore-Sorber Soil Screening - LBG has requested a quote for 100 Gore Sorber units to be utilized in an offsite soil screening application prior to offsite well installation or soil sampling. We will provide the results when received. We have not yet contacted the city of Dayton to inquire whether this application will be exempt from permitting requirements. We will do so upon receiving your okay to proceed.

Facility Interview - Per Doug Orf's suggestion, LBG personnel will request some time with Mr. Dennis Morrow, Plant Maintenance Superintendent, to tour the site with old plans and drawings to learn as much as possible about potential areas of interest and history of the site.

Press Footings Excavation - LBG will be onsite Monday, May 3 to conduct soil screening during Carlo's soil excavation. Based on analytical results and per our discussions yesterday, the excavated soils are not hazardous.

APR 30 '98 19:11 6124901006 PAGE 02 Computer Model - As we discussed yesterday, the computer ground-water model has been built and is currently in the process of calibration. Following calibration, particle tracking will be run in order to predict contaminant transport. This information will be utilized to increase the efficiency and reduce the costs of offsite investigations, if implemented.

Site Trailer - LBG has left a voice message with Marvin Neargarder regarding plant approval for an onsite field trailer for use of LBG field personnel and equipment storage. We are making appropriate arrangements for trailer rental, power hook-up, and telephone hook-up. We will not proceed until discussing placement with the plant and receiving their okay.

S:\TECHICHRY\DAYTON\INPROG\DAYPLAN.MEM

S104901006 POSE OR

#### PROJECT STATUS UPDATE Number 3 June 30, 1998

TO:

Gary Stanczuk, Chrysler PP&R Lynn Buhl, Chrysler Legal Carolyn Carlson, DTP Joe Whitlock, DTP Dave Ramsey, DTP Mark Autio, DTP Dick Beck, DTP

Fred McCarty, DTP

LEGUETTE DYHOUEHKO

FROM:

Ken Vogel, Leggette, Brashears & Graham, Inc. (LBG)

SUBJECT:

Dayton Thermal Products Plant Environmental Project

A summary of key project issues and related information is summarized below:

| Contact   | DTP                            | PP&R                            | LBG                              |
|-----------|--------------------------------|---------------------------------|----------------------------------|
| Primary   | Joe Whitlock<br>(937) 224-2467 | Gary Stanczuk<br>(248) 576-7365 | Ken Vogel<br>(612) 490-1405      |
| Secondary | Dave Ramsey (937) 224-2501     | Greg Rose<br>(248) 576-7362     | Kristin Yahnke<br>(612) 490-1405 |

- A pre-bid meeting was held at the plant on June 25 for the sewer line cleanout of Building 40B. Bids are due on July 2. Work is tentatively scheduled to begin as early as July 6. LBG is coordinating and contracting the work.
- The plant requested that the oil separator south of Building 40B be abandoned. LBG learned that a sewer line in the south parking lot was recently "blowing oil" following heavy rains. Visual inspection of the sewer on June 25 confirmed the presence of an oily liquid in the line. Press foundation installation and plugging of Building 40B sewer lines may have caused the external sewer to overflow. LBG recommends that the external sewer be mapped, pumped and possibly, abandoned if not currently in use, as this sewer may be a potential source area of groundwater and/or soil impacts along the southern property area.
- Gary Stanczuk and Ken Vogel met with Jim Shoemaker, City of Dayton, Division of Environmental Management on June 24 to discuss the current environmental status of the plant. He believes an Urban Setting Designation (under VAP) for the plant is unlikely due to the site's proximity to the Wellhead Protection Area.

פטניב מס

-2-

- Ken Vogel met with Estill Johnson and Scott Holmes, City of Dayton, Division of
  Civil Engineering on June 25 to discuss the permitting process necessary for
  conducting a Gore-Sorber survey off site. The fee will be \$10 per test hole and
  locations must be reviewed/approved by the city. LBG must provide detailed
  maps and utility locations with the permit application.
- Silicate line construction is anticipated to begin during mid-September. A meeting at the plant was held on June 24 to discuss this construction and the SVE construction. Topics discussed included: silicate schedule, placement and excavation details, SVE system layout, SVE treatment building placement, the timing and impacts of sewer line cleanout to SVE system and plant construction, plant specifications for floor concrete and/or parking lot surfacing. It was discovered that some SVE wells may be located within the footprint of the planned silicate line. Therefore, LBG has approximately 2½ months of operation available on the affected wells.
- Ken Vogel met with S&D Mechanical and Freedom Electric on June 25 to walkover the proposed SVE construction area and to discuss construction requirements.

#### ACTION ITEMS

#### **Dayton Thermal Products Plant**

- Joe Whitlock will conduct an internal records search regarding the layout of the
  external sewer line in the south parking lot that was observed to contain an oily
  liquid substance. Analytical results of the oily substance obtained by the plant will
  be communicated to LBG.
- Joe Whitlock will continue to aid in obtaining the SVE air permit or exemption.
- Marvin Neargarder will keep LBG updated on any future revisions to the silicate line design and/or schedule. AutoCad drawings on diskette will be provided.

#### Leggette, Brashears & Graham. Inc.

- LBG will prepare a permit request for conducting an off-site Gore Sorber survey on city right-of-ways.
- LBG will prepare and transmit periodic project updates to the distribution list, and will be responsible for communication and coordination of all project-related issues.

- LBG will be responsible for bidding, contracting, and supervising SVE equipment procurement and installation by qualified, union contractors.
- LBG will be responsible for bidding, contracting, and supervision of sewer line clean-out activities.
- LBG will coordinate the disposal of drummed soil cuttings from well drilling activities and will submit a cost estimate to Chrysler PP&R for doing so.

#### Chrysler PP&R

- Chrysler PP&R will coordinate and track air permit exemption request submittal and approval through OEPA (confirmation of approval to Vogel). This information is needed as soon as possible.
- Chrysler PP&R will review and approve funding requests.
- Chrysler PP&R, along with Chrysler Legal, will be involved in determining meeting dates, agendas, etc. for meetings with third parties.

KV:kw Attachment S:\TECH3CHRY\DAYTONFINALDOC\STAT3.MEM

# ENVIRONMENTAL SUMMARY March 16, 1998



#### Current Environmental Status

- A minimum of two large, ground-water plumes consisting of chlorinated solvents have merged to cover virtually the whole site (50+ acres);
- Highest concentrations at southern (downgradient) property line;
- High probability of significant offsite ground-water impact;
- Backup water supply well is screened within the upper, impacted aquifer;
- The plant is located in a potentially complex hydrogeologic setting due to 2 nearby rivers, local well pumping, and numerous nearby industries.

#### Site Background and Setting

- History as industrial site from 1907 (Maxwell cars);
- Located in mixed industrial, commercial, residential area between 2 tributaries of the Great Miami River:
- Numerous historical reports of releases, contaminant observation, and solvent use;
- Several adjacent industries are possible sources of ground-water impacts;
- Adjacent Gem City Chemicals ground-water recovery wells may influence site.

#### Water Table Elevation and Flow

- 25 feet to water, 65 foot saturated thickness;
- Till layer separates impacted upper aquifer from clean lower aquifer;
- Lithology is sand, gravel, cobbles;
- Historical reports show ground water flow to NE;
- LBG data shows flow to NE and SE, except when site supply well is pumping;
- Ground-water elevations have varied up to 6 feet;
- No significant vertical gradients.

#### Soil Quality

- Highest observed soil concentrations are in the 10's to 100's of ppm (total VOCs include PCE, TCE, TCA, DCE, DCA) and occur in two localities with historical solvent storage (Building 40B and Building 50);
- Impacted soils excavated during Building 59 construction were stockpiled and treated on site (northeast corner of property).

March 13, 1998

-2-

#### Ground-Water Quality

- Highest observed ground-water concentrations are above action levels and range up to 73 ppm along the southern property line;
- Two dissolved-phase plumes have merged together the central plume is composed predominately of PCE and TCA, while the southern plume is composed primarily of TCE and DCE.
- Concentrations generally decrease with depth (no "sinking plume"), but full vertical extent of upper aquifer is impacted.

#### Future Project Considerations

- Legal issues;
- Public relations issues:
- Notification/involvement of OEPA;
- Conduct comprehensive review of facility records, solvent storage and use, tank closures, piping, waste sumps, etc.
- Conduct comprehensive review of adjacent facility histories via non-conventional means (LBG already researched OEPA files with very little success):
- Identify the extent and magnitude of source areas;
- Evaluate remedial options for source areas;
- Conduct local/regional hydrogeologic research/compilation;

FEAGETTE DIVIDITEINO

- Conduct aquifer pump test using shallow supply well or new well:
- Construct computer model of local/regional hydrologic conditions;
- Delineate plume with offsite drilling and well installation:
- Conduct evaluation of remedial options for ground-water plume;
- Evaluate status of excavated soil piles from Building 59 construction;
- Schedule:
- Budget.

S:\TECH3CHRY\DAYTON\INPROG\SUMMARY.MEM





#### from the desk of......

### **GARY STANCZUK**

May 15, 1998

To:

Joe Whitlock

Fax 848-2915

Ref:

**Dayton Thermal Products Plant** 

**Groundwater Issues** 

As we discussed today we would like to setup a meeting with your Plant Management to inform them of the groundwater conditions under the plant and our plan to manage the impacted water. The proposed time is as follows:

Date:

May 27, 1998

Time:

3:00 to 4:30pm

Attendees:

Greg Rose

Remediation & Superfund Manager

Lynn Buhl

Office of General Council Remediation Project Manager

Gary Stanczuk

Ken Vogel

LBG (Our Environmental Partner for Dayton Site)

Thanks for your help. Please call me at Tl. 776-7365, Outside # 248-576-7365.



From the Desk of ......

### J. A. Carlson

October 23, 1997

To: Ron Boltz

Re: Dayton Thermal Products

Subsurface Issues

Observations during past construction projects in the area of Building 59 raised potential soil and groundwater concerns. Investigations were conducted (1991 through 1995) that indicate chlorinated solvents are present in the soil and groundwater, possibly from historic use of solvent degreasers at the plant. The facility is located in an industrial area, which has a suspected regional DNAPL groundwater problem as well. Subsequent sampling along the property line indicates groundwater impacts, although the geographic distribution of the impacts has not been established.

An upcoming Plant construction project requires excavation and removal of soil from within Building 40-B, which contained large solvent cleaning tanks. Prior to construction an investigation is planned to determine soil management procedures. Removal of this soil will be done inside an operating plant and may require special health and safety controls.

The forecasted liability for Dayton is \$ 240,000, based on current information and does not include potential groundwater remediation. Construction projects are planned in the area of Building 40-B, which will likely necessitate additional investigation and potential remediation. Scheduled cash flow for investigation activities during the 4th quarter of 1997 is \$ 150,000.

c: Greg Rose



# Inter Company Corresponden

Telephone

Date

889-8619

November 12, 1993

To-Name & Department

CIMS Number

Acustar

Luther Blair Manager of Environmental Planning

404-02-01

From-Name & Department

CIMS Number

Curt Chapman

**Environmental & Energy Affairs** 

429-02-04

Sublect:

# Review and Comments of Dayton Thermal Site Assessment Summary Prepared by Clean Tech, Dated October, 1993

I have reviewed the above document and have some specific suggestions for additions, deletions, and changes.

#### Page 4:

An Area Map showing all the industrial and commercial facilities including Dayton Thermal within a 1/4 or 1/2 mile radius of the plant would be useful to show who are our neighbors and also useful later in the report when they start discussing sites of impact.

A discussion of topography of the Site would be beneficial especially when tied in with an estimate of the direction of groundwater flow. This then gives an idea which sites of concern are possibly up- or down gradient.

#### Page 16, Section 3.2:

I would suggest obtaining a current listing of sites of concern from a data base such as Environmental Audit, Inc., who was used by Burlington in their report of March 16, 1992. I would also suggest not utilizing ZIP code unless we are certain what area around the plant that particular ZIP covers. This reduces the chance that a search could miss a critical issue if the Dayton plant was near the area not covered by that ZIP code.

I would also suggest checking files on listed sites as well as all commercial and industrial sites within the radius of investigation. Agencies where inquiries and files should be checked are as follows:

#### Local:

Police and Fire Depts. for records of responding to emergency spills

Health Dept. for complaints and records of inspections

#### State:

Ohio EPA for State Haz Waste Sites, Emergency Response Reports and RCRA generators, transporters and TSDFs

Ohio Bur. of Undergrd. Stor. Tank Regs (BUSTR) for LUST and USTs

U.S. EPA:

Superfund Sites

Place all sites of concern on Area map.

Page 21, Section 4.1 and 4.2:

We need a bibliography to know where their sources came from.

Figure 11 and 12:

Place location of Dayton Thermal on maps for reference

Figure 13:

Tank plume moving in an apparent upgradient direction is not accounted for in the text.

#### SILICATE LINE SOIL PILE APRIL 30, 1999

# TOXICITY CHARACTERISTICS LEACHING PROCEDURE (TCLP) UNITS ARE IN MICROGRAMS PER LITER (ug/L)

| VOLATILE ORG | ANIC COMPO         | UNDS      |            |           |           |                     |                            |        |         |                  |         |
|--------------|--------------------|-----------|------------|-----------|-----------|---------------------|----------------------------|--------|---------|------------------|---------|
| SAMPLE       | DILUTION<br>FACTOR | NAT CHICK | 1-DIGHEORO | H GROFORM | DICHLORO. | ARBON<br>TRACHLORID | RICHIO<br>OF THE<br>OF THE | ENZGNE | ETRA!!! | ALORO<br>FINZENE |         |
| MAX CONC.    |                    | 200       | 700        | 6,000     | 500       | 500                 | 500                        | 600    | 700     | 100,000          | 200,000 |
| CP00001      | 5.0                | <50       | <50        | <50       | <50       | <50                 | 52                         | <50    | 9 J     | <50              | 16 J    |
| CP00002      | 5.0                | <50       | <50        | <50       | <50       | <\$0                | 15 J                       | <50    | 7 J     | <50              | <50     |

| PESTICIDE OR       | GANICS              |      |          |                    |        |            |                       |
|--------------------|---------------------|------|----------|--------------------|--------|------------|-----------------------|
| SANPLE<br>SOCATION | AMMA; BHC<br>INDANE |      | F AOHLOR | EPTAOHLOR<br>OXIDE | THOX   | XXHENE     | TEONIOAC<br>CHLOROANE |
| MAX. CONC.         | 400                 | 20   | 8        | 8                  | 10,000 | 500        | 30                    |
| CP00001            | 0.043 J             | <1.0 | <0.25    | <0.25              | <2.5   | <25        | <b>⊘</b> ≲5           |
| CP00002            | <25                 | <1.1 | <0.25    | <0.25              | <2.5   | <b>⊘</b> 5 | <25                   |

| HERBICIDE OR |        |      |
|--------------|--------|------|
| WHE          |        |      |
| MAX. CONC.   | 10,000 |      |
| CP00001      | <7.5   | <2.5 |
| CP00002      | <7.5   | <2.5 |

| METALS             | 1     |         |       |        |       |       |        |              |
|--------------------|-------|---------|-------|--------|-------|-------|--------|--------------|
| SAMPLE<br>LOCATION | 9     | 2       | Q V   |        | 8     |       | 2      | IVER<br>IVER |
| MAX. CONC.         | 5,000 | 100,000 | 1,000 | 5,000  | 5,000 | 200   | 1,000  | 6,000        |
| CP00001            | 6.6 B | 707 E   | 15.9  | 5.8    | 38.4  | ⊲0.05 | 17.9 N | <0.40        |
| CP00002            | 11.3  | 386 E   | 17.2  | 0.97 8 | 16.5  | <0.05 | 16.9 N | <0.40        |

#### SILICATE LINE SOIL PILE **APRIL 30, 1999**

#### **TOXICITY CHARACTERISTICS LEACHING PROCEDURE (TCLP)** UNITS ARE IN MICROGRAMS PER LITER (ug/L)

#### SEMI-VOLATILE ORGANIC COMPOUNDS

NO SEMI-VOLATILE ORGANIC COMPOUNDS WERE DETECTED ABOVE THE LABORATORY METHOD DETECTION LIMITS OF 50 AND 250 UG/L FOR THE CP00001 AND CP00002 COMPOSITE SOIL SAMPLES.

CP00001: COMPOSITE SAMPLE OF SOILS WITH PID READINGS <25 PPM CP00002: COMPOSITE SAMPLE OF SOILS WITH PID READINGS >25 PPM

MAX. CONC.: MAXIMUM CONCENTRATION OF CONTAMINANTS FOR TCLP FROM DEPA VOLUME TWO: REGULATIONS, 1998-2 EDITION.

- B: ANALYTE WAS FOUND IN THE ASSOCIATED BLANK AS WELL AS THE SAMPLE.
- E: ESTIMATED VALUE (SEE REPORT QUALIFIERS)
- J: ESTIMATED VALUE
- N: SAMPLE SPIKE RECOVERY IS OUTSIDE OF CONTROL LIMITS
- <: LESS THAN

S:ITECHISCHRYDAYTONANALYTICAL SilicateLineStockpile, TCUP 05/10/1999, 8:57 AM

PAGE 2 OF 2

LEGGETTE, BRASHEARS & GRAHAM, INC.

-- -- --- --- -- ---

#### SILICATE LINE SOIL PILE APRIL 30, 1999

# POLYCHLORINATED BIPHENOLS AND WET CHEMISTRY CONCENTRATIONS IN MICROGRAMS PER KILOGRAM (ug/kg)

| POLYCHLORINA               | TED BIPHENYL | S (PCBs) |              |              |           |                                       |              |            |
|----------------------------|--------------|----------|--------------|--------------|-----------|---------------------------------------|--------------|------------|
| NOLUME<br>SAMPLE<br>SAMPLE | 772321 2022  | Ö        | 23<br>0<br>0 | 00108<br>842 | G[08 1248 | 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 | ARDI OR (240 | TOTAL PERS |
| RES/COM USE                |              | -        | -            |              | -         |                                       |              | 1,000      |
| IND. USE                   |              | -        | -            |              | -         |                                       | _            | 25,000     |
| CP00001                    | <35          | <46      | <35          | <24          | <24       | 23 J                                  | <35          | 23 J       |
| CP00002                    | <34          | <44      | <34          | <b>⊘</b> 3   | <23       | 7.4 J                                 | <34          | 7.4 J      |

| WET CHEMIST | RY          |   |                |                  |
|-------------|-------------|---|----------------|------------------|
| SAMPLE      | GNITABILITY | CORROS(WIY<br>(In In In In In In In In In In In In In I | RECTIVE STATES | REACTIVE SULFIDE |
| UNITS       | FAHRENHEIT  | S.U.  | mg/kg          | mg/kg            |
| CP00001     | >140        | 8.4   | <134           | <134             |
| CP00002     | >140        | 8.6   | <129           | <129             |

CP00001: COMPOSITE SAMPLE OF SOILS WITH PID READINGS <25 PPM CP00002: COMPOSITE SAMPLE OF SOILS WITH PID READINGS >25 PPM

<: LESS THAN
>: GREATER THAN

RESICOM USE: RESIDENTIAL/COMMERCIAL LAND USE MAXIMUM ALLOWABLE CONCENTRATION

IND, USE: INDUSTRIAL LAND USE MAXIMUM ALLOWABLE CONCENTRATION



# GENERATOR'S WASTE PROFILE SHEET PLEASE PRINT IN INK OR TYPE

| Şe          | rvice Agreement on File? UYES NO  |             | Profile Number: WMI                     |             |              |                    |
|-------------|---|-------------|---|-------------|--------------|--------------------|
|             |   |             | Renewal Date:                           |             | 7            | 7                  |
| A.          | Waste Generator Information   |             |   |             |              |                    |
|             | DIL DISTINGUIDI   | 1-          | 2/19/                                   |             |              |                    |
| 1.          | Generator Name: Daimter Chrysler - Ther Mal Prod  | 135         | SIC Code: 3485                          | 17 A        |              |                    |
| 3.          | Facility Street Address: 1600 Webster 54  | 4.          | Phone: (937) 224-2                      | <u>461</u>  |              |                    |
| 5.          | Facility City: Dayton   | 6.          | State/Province: Ohip                    |             |              |                    |
| 7.          | Zip/Postal Code: 식5식0식  | 8.          | Generator USEPA/Federal ID              | #:<br>      | MIDD         | 14703              |
| 9.          | County: Montgomery  | 10.         |   | _           | <u> </u>     |                    |
| 11.         |   | 12.         |   |             |              |                    |
|             | Customer Contact:   | 14.         | Customer Fax:                           |             |              |                    |
|             | Waste Stream Information  | 17.         | Customer Fax.                           |             |              |                    |
| <b>Þ.</b> . | waste stream information  |             |   | _           |              |                    |
| 1.          | Name of Waste: So, /  |             | 2. State Waste Code:                    | V/A         |              |                    |
| 3.          | Process Generating Waste:   | <b></b> - ' |   | <u>-/A</u>  |              |                    |
| ٠.          |   |             |   |             |              |                    |
|             | Construction activities   |             |   |             |              |                    |
|             |   |             |   |             |              |                    |
|             |   |             |   |             |              |                    |
| 4.          | Estimated Annual Volume: 500  | ים          | ons ⊠Yards □Other (specify)             |             |              |                    |
| 5.          | Personal Protective Equipment Requirements:   | 7           | <i>P</i> –                              |             |              |                    |
| 6.          | Transporter/Transfer Station:   |             |   |             |              |                    |
| 7.          | Is this a U.S. Department of Transportation (USDOT) Hazardou  | e Mai       | enal? (If no skin 8 9 & 10)             |             | <b>□YES</b>  | MINO               |
|             |   |             |   | ••          | 1,50         | Mito               |
| 8.          | Reportable Quantity (lbs.; kgs.):   | <b>-</b> 9. | Hazard Class/ID #.                      | <del></del> |              |                    |
| 10.         |   |             |   | <del></del> |              |                    |
|             | ☐Check if additional information is   |             |   | iched i     | pages:       |                    |
| C.          | Generator's Certification (Please check appropriate responses,  | sign.       | and date below.)                        |             |              | ·                  |
|             |   |             |   |             |              |                    |
| 1.          | Is the waste represented by this waste profile sheet a "Hazardous Waste   |             |   |             |              |                    |
|             | Mexican and/or state/province regulation, in the location where generate  | d or u      | timately managed?                       |             | □YES         | <b>⊠</b> NO        |
| _           |   |             |   |             |              |                    |
| 2.          | Does the waste represented by this waste profile sheet contain regulated  |             |   |             |              | 44.0               |
|             | concentrations of Polychlorinated Biphenyls (PCBs)?   |             | *************************************** |             | ☐YES         | BNO                |
| •           | Deep this works smalle shoot and all attachments contain two and accurate   | -AA-        | and the west                            |             |              |                    |
| 3.          | Does this waste profile sheet and all attachments contain true and accurr material?   |             |   |             | YES          |                    |
|             | [[RB[G]]]]]   | ••••••      | ••••••                                  |             | Mica         |                    |
| 4           | Has all relevant information within the possession of the Generator regard  | lina ka     | nown or suspended hazards               |             |              |                    |
|             | pertaining to the waste been disclosed to the Contractor?   | •           |   |             | <b>TYES</b>  | □NO.               |
|             | portuning to the waste soon absorbed to the contractor  | •••••       |   |             | 7            |                    |
| 5. J        | s the analytical data attached hereto derived from testing a representative   | a sam       | nle in accordance with                  |             |              |                    |
|             | 40 CFR 261.20 (c) or equivalent rules?  |             |   | □NA         | TYES         | □NO                |
|             | 1   | ••••••      |   |             | 4            | <u> </u>           |
| 6. \        | Will all changes that occur in the character of the waste/be/identified by th   | e Ger       | nerator and disclosed to the            |             |              |                    |
| - (         | Contractor prior to providing the weste to the Contractor?  |             |   |             | <b>S</b> YES | LINO               |
|             | / Let West  |             |   |             | 7            | <u> </u>           |
| Certi       | fication Signature:   |             | Title: Environmen                       | vtal i      | model        | mator              |
|             | e (Type or Print): TEWNITION Company  | Nam         |   |             | Date:        | 4/13/4             |
|             | O TO TO THE STATE OF THE STATE | 144111      |   |             | -            | <del>- y y -</del> |
| D. V        | VMI Management's Decision   |             |   | FOR V       | VMI US       | E ONLY             |
| 1.          | Management Method: □Landfill □Solidify □Bioremediation  | ⊓Otl        | ner (Specify)                           |             |              |                    |
| 2.          | Proposed Ultimate Management Facility:  | _           | 3. Hours of acceptance:                 |             |              | □NA                |
| 4.          | Supplemental Information:   |             |   |             |              | ٠٠                 |
| ₹.          | Oupplemental information.   |             |   |             |              |                    |
|             |   |             |   |             |              |                    |
|             |   |             |   |             |              |                    |
| 5.          | Precautions, Special Handling Procedures, or Limitations on App   | roval       | •                                       |             |              |                    |
| _           |   |             |   |             |              | ·                  |
| •           |   |             |   |             |              |                    |
| Spec        | ial Waste Decision  |             |   | <u>d r</u>  | Disapp       | roved              |
|             | sperson's Signature:  |             | Date:                                   |             | ,            |                    |
|             | ion Approval Signature (Optional):  |             | Date:                                   |             |              | <del></del>        |
|             |   |             |   |             |              | I                  |
| Spec        | ial Waste Approvals Person Signature:   |             | Date:                                   |             |              |                    |

03/23/1999 11:08

9 72675110





# GENERATOR'S WASTE PROFILE SHEET Prange PLEASE PRINT IN INK OR TYPE

#### Instructions

representative.

Information on this form : used to determine if the waste may be transported, treated, stored or disposed in a legal, safe, and environmentally sound a niner. This information will be maintained in strict confidence. Answers must be provided for section A. B, and C and must be printed in ink or typed. A response of "None" or "NA" (not applicable) can be made if appropriate. If additional space is need id, indicate on the form that additional information is attached, and attach the information to the Generator's Waste Profi . Sheet. If you have questions concerning this form, please contact the Contractor's sales

#### A. Wasta Generator III prination

- 2.
- 4. 5.
- 6.
- 7.

- waste (if applicable)

#### B. Waste Stream Infort ation

- building maintenanc ).

  - 2Inc production?
- manage the waste a eam.

Title - Enter Employee's I Jo. Name - Print or Type Employee's name.

D. Will Management's ecision To be completed by WMI

Generator Name - inter the name of the facility where the waste is generated.

SIC Code - Enter the four digit Standard Industrial Classification Code for the facility where the waste is generated.

Facility Street Adc ass - Enter the street address (not P.O. Box) of the facility where the waste is generated.

Phone - Enter Geni rator's area code and phone number.

Facility City - Enter the city where the waste is generated.

State/Province - El :er the state or province where the waste is generated.

Zip/Postal Code - I nier the generating facility's zip or postal code.

8. Generator USEPA: ederal ID# - Enter the identification number Issued by the USEPA, Canadian, or Mexican Federal Agency to the facility generating the waste (if applicable).

County - Enter the punty where the waste is generated.

10. State/Province ID : - Enter the identification number issued by the state or province to the facility generating the

11. Customer Name -1 ntity that the Contractor is directly working with regarding the represented waste stream. If the same as the Generi or, mark "Same as Above".

Customer Phone - inter technical contact's area code and telephone number.

13. Customer Contact. Enter the name of the person who can answer technical questions about the waste.

14. Customer Fax - Arc a code and facsimile number for the customer.

Name of Waste - E ier a name generally descriptive of this waste (e.g., paint sludge, fluorescent buibs).

2. State Waste Code I fapplicable, the code assigned to the specific waste stream by the state regulatory agency.

3. Process Generatin Waste - Describe the process generating the waste in detail. List the specific process/operation or source that gener ites the waste (e.g., incineration of municipal refuse, asbestos removal, wastewater treatment,

At a minimum, the C inerator should answer the following questions in determining the process generating the waste.

What chemical are stored and/or used at the facility?

Is the waste generated from the production/manufacturing of any of the following industries: wood preservation; inorganic pign: ints; organic pigments; pesticides; explosives; petroleum refining; iron and steel, copper, lead or

is the waste a isult from degressing, solvent parts cleaning, recovery/reclaiming of solvents (bottoms), wastewater treatment (slux jes), or electroplating?

4. Estimated Annual blume - Approximate volume in tons, yards, or other (e.g., drums, gallons) that will be received by the ultimate management facility. This volume amount is not intended for use in complying with state and/or permit restrictions.

Personal Protective Equipment Requirements - All personal protective equipment that is necessary to safely

Transporter/Transi r Station - Transporter and/or transfer station name.

Is this a U.S. Deparment of Transportation (USDOT) hazardous material?-Choose the appropriate response: yes or no.

Reportable Quantil (lbs.; kgs.) - If the answer to 7 is yes, enter the Reportable Quantity (RQ) established by 40 CFR 302.4 or eq. valent Canadian or Mexican regulation for this waste. Indicate the appropriate units for the RQ.

Hazard Class/ID# - f the answer to 7 is yes, indicate the proper USDQT hezard class and identification number.

10. USDOT Shipping N me - if the answer to 7 is yes, enter the proper USDOT shipping name for the waste.

C Generator's Curtification

Indicate the appropriate r sponse to questions/statements 1, 2, 3, 4, 5, and 6. By signing this Generator's Waste Profile Sheet, the Generator cerl lies the responses are true and accurate with respect to the waste stream(s) listed.

Certification Signature - Signature of an authorized employee of the Generator or representative of the generator if authorized

In writing by the generato

Company Name - Comp: ny employing the person certifying the Generator's Waste Profile Sheet.

Date - Enter the date this Generator's Waste Profile Sheet is signed.

FOR WMI USE ONLY

Form 14884-4182



# GENERATOR'S WASTE PROFILE SHEET PLEASE PRINT IN INK OR TYPE

| Se         | vice Agreement on File?   |                  | Profile Number: VVI             | лі <u>—</u> |              |             |
|------------|---|------------------|---------------------------------|-------------|--------------|-------------|
| A.         | Waste Generator Information   |                  | Renewal Date:                   | i.          |              |             |
|            |   |                  | CIC Codes                       |             |              |             |
| 1.         | Generator Name:   | - 2.             | SIC Code:                       |             |              |             |
| 3.         | Facility Street Address:  | . <del>4</del> . | Phone: ( ) State/Province:      |             |              |             |
| <b>5</b> . | Facility City:  | . 6.             | Generator USEPA/Federal I       | 5           |              |             |
| 7.         | Zip/Postal Code:  | . 8.             | •                               | J#: _       |              |             |
| 9.         | County:   | 10.              |                                 |             |              |             |
| 11.        |   | 12.              |                                 | <del></del> |              |             |
| 13.        | Customer Contact: Waste Stream Information  | 14.              | Customer Fax:                   |             |              |             |
| В.:        |   |                  |                                 |             |              | · ·         |
| 1.         | Name of Waste:  | 2                | . State Waste Code:             | NI          | 4            |             |
| 3.         | Process Generating Waste:   |                  |                                 |             |              |             |
|            | Construction activities   |                  |                                 |             |              |             |
|            |   |                  |                                 |             |              |             |
|            |   |                  |                                 |             |              |             |
| 4.         | Estimated Annual Volume:  |                  | ons  Yards Other (specif        | y)          |              |             |
| 5.         | Personal Protective Equipment Requirements:   | D                |                                 |             |              |             |
| 6.         | Transporter/Transfer Station:   |                  |                                 |             | _            |             |
| 7.         | Is this a U.S. Department of Transportation (USDOT) Hazardous   | Mate             | erial? (If no, skip 8, 9, & 10) |             | ☐YES         | XINC        |
| 8.         | Reportable Quantity (lbs.; kgs.):   | 9.               | Hazard Class/ID #:              |             | _            |             |
| 10.        |   |                  | •                               |             |              |             |
|            | ☐ Check if additional information is  |                  |                                 | ttached     | pages:       |             |
| C.         | Generator's Certification (Please check appropriate responses,  | sign, i          | and date below.)                |             |              |             |
| 1.<br>2.   | Is the waste represented by this waste profile sheet a "Hazardous Waste, Mexican and/or state/province regulation, in the location where generated Does the waste represented by this waste profile sheet contain regulated concentrations of Polychlorinated Biphenyls (PCBs)? | or ult           | mately managed?                 | ٠           | □YES         | • •         |
| 3.         | Does this waste profile sheet and all attachments contain true and accura material?   |                  |                                 |             | <b>⊠</b> YES | ,           |
| 4.         | Has all relevant information within the possession of the Generator regardi pertaining to the waste been disclosed to the Contractor?   | ng kno           | own or suspected hazards        |             | <b>⊠</b> YES | □ио         |
|            | Is the analytical data attached hereto derived from testing a representative 40 CFR 261.20 (c) or equivalent rules?   |                  |                                 | □NA         | YES          | □ио         |
| 6. '       | Will all changes that occur in the character of the waste be identified by the  | Gene             | rator and disclosed to the      |             |              |             |
|            | Contractor prior to providing the waste to the Contractor?  |                  |                                 |             | <b>Z</b> YES | □NO         |
|            |   |                  |                                 |             | <i>r</i>     | <del></del> |
|            | ification Signature:  |                  | Title:                          |             |              |             |
| Nan        | ne (Type or Print): Company   | Name             | :                               |             | Date:        |             |
| D. V       | VMI Management's Decision   |                  |                                 | FOR         | WMI US       | E ON        |
| 1.         | Management Method: Landfill Solidify Bioremediation   | ⊐Öthe            | er (Specify)                    |             |              |             |
| 2.         | Proposed Ultimate Management Facility:  |                  |                                 |             |              | □N          |
| 4.         | Supplemental Information:   |                  | •                               |             |              | _ 🖵…        |
|            |   |                  |                                 |             |              |             |
| 5.         |   |                  |                                 |             |              |             |
| Sne        | cial Waste Decision   |                  |                                 | ind f       | Disapp       |             |
|            | sperson's Signature:  |                  |                                 | eu [        | Toisabb      | HOVEC       |
| Divi       | sion Approval Signature (Optional):   |                  | Date:                           |             |              |             |
| Sne        | cial Waste Approvals Person Signature:  |                  | Date:                           |             | ·            |             |
| <u> </u>   |   |                  | Date.                           |             |              |             |

| UPS Next Day Air® UPS Worldwide Express  | WEIGHT DIMENSIONAL ZONE WEIGHT ENTER "LTR" WEIGHT AND IF LETTER ZONE ZONE  |
|--|--|
| Shipping Document  | TYPE OF NEXT DAY WORLDWIDE EXPRESS (INTERNATIONAL)   |
| See instructions on back. Call 1-800-PICK-UPS (800-742-5877) for additional information.                     | SERVICE FOR WORLDWIDE EXPRESS SHIPMENTS DOCUMENTS Mark an 'X' in this box if shipment only contains documents of the commercial value.  ONLY   |
| TRACKING NUMBER N329 5360 54 5   | SATURDAY SAT |
| SHIPMENT FROM  SHIPPER'S UPS SHIPPER NO. / UPS BILLING NO.  PORTUPS USE  ACCOUNT 6 4 3 0 5 1 9 6 5 0 450 X24 | OPTIONAL SERVICES  DECLARED VALUE S Contents as a sacroscalely protected up to \$100 For fractated value of \$100 For fractated value over \$100, see instructions.  AMOUNT  |
| REFERENCE NUMBER   | C.O.D. effect amount to be socieded and affact completed UPS CO.0. tag to package. AMOUNT  |
| NAME STOWN STOWNS WE-576-7365  | 6 ADDITIONAL HANDLING CHARGE An Additional Handling Charge applies for certain items. See instructions.  |
| COMPANY  | TOTAL CHARGES  |
| CHRYSLER CORPORATION STREET ADDRESS BOO CHRYSLER DR  | METHOD OF PAYMENT  BILL SHIPPER  BILL BILL THIND RECEIVER PARTY CARDIT CARD Diner's Club MasterCard Visa  CHECK  CHECK  CHECK  CHECK CASH  STATE  CASH  Visa  CHECK CASH  STATE  CASH  Visa  CHECK CASH  STATE  CASH  STATE  CASH  STATE  CASH  STATE  CASH  STATE  CASH  STATE  CASH  STATE  CASH  STATE  CASH  STATE  CASH  CHECK CASH  STATE  CASH  STATE  CASH  STATE  CASH  CHECK CASH  STATE  CASH  CHECK CASH  STATE  CASH  CHECK CASH  STATE  CASH  CHECK CASH  STATE  CASH  CHECK CASH  STATE  CASH  CHECK CASH  CASH  STATE  CASH  CHECK CASH  CAS |
| CITY AND STATE ZIP CODE AUBURN HILLS MI 48236  | L RECEIVERS / THIRD PARTY'S UPS ACCT. NO. OR MAJOR CREDIT CARD NO. EXPIRATION  |
| 2 EXTREMELY URGENT DELIVERY TO NAME TELEPHONE  | DATE   |
| Joe Whitlock 937-224-2467  | THIRD PARTY'S COMPANY NAME   |
| Dayton Remal   | STREET ADDRESS   |
| STREET ADDRESS DEPT/FLOOR  | CITY AND STATE ZIP CODE  |
| CITY AND STATE (INCLUDE COUNTRY IF INTERNATIONAL)  ZIP. CODE.  45 45 45 45                                   | 9 SHIPPER'S DATE OF SHIPMENT   |
|  | SHIPPER'S SIGNATURE AND DATE OF SHIPPERT SIGNATURE AND DATE OF |

والمراجعة والمتحال والمناطق والمناطق والمناطق والمناطق والمناط والمناطق وال

010191120 6/97 M

and the second transfer of the second

9 72675110 03/23/1999 11:08

STONY HOLLOW RDF



#### GENERATOR'S WASTE PROFILE SHEET PLEASE PRINT IN INK OR TYPE

#### Instructions

representative.

Information on this form ; used to determine if the waste may be transported, treated, stored or disposed in a legal, safe, and environmentally sound in anner. This information will be maintelned in strict confidence. Answers must be provided for section A, B, and C and must be printed in ink or typed. A response of "None" or "NA" (not applicable) can be made if appropriate. If additional space is need of, indicate on the form that additional information is attached, and attach the information to the Generator's Waste Prof. - Sheet, If you have questions concerning this form, please contact the Contractor's sales

#### A. Waste Generator In prination

- Generator Name inter the name of the facility where the waste is generated.
- SIC Code Enter the four digit Standard Industrial Classification Code for the facility where the waste is generated. 2.
- 3. Facility Street Adc ass - Enter the atreet address (not P.O. Box) of the facility where the waste is generated.
- 4. Phone - Enter Geni rator's area code and phone number.
- 5. Facility City - Enter the city where the waste is generated,
- State/Province El er the state or province where the waste is generated. 6.
- Zip/Postal Code I nter the generating facility's zip or postal code. 7.
- 8. Generator USEPA/ ederal ID# - Enter the Identification number Issued by the USEPA, Canadian, or Mexican Federal Agency to the facilii generating the waste (if applicable).
- County Enter the punty where the waste is generated.
- 10. State/Province ID : Enter the identification number issued by the state or province to the facility generating the waste (if applicable)
- 11. Customer Name I ntity that the Contractor is directly working with regarding the represented waste stream. If the same as the Generi or, mark "Same as Above".
- 12. Customer Phone inter technical contact's area code and telephone number.
- Customer Contact: Enter the name of the person who can answer technical quantions about the waste.
- 14. Customer Fax Ari a code and facsimile number for the customer.

#### B. Waste Stream Information

- Name of Waste E ler a name generally descriptive of this waste (e.g., paint sludge, fluorescent buibs).
- State Waste Code If applicable, the code assigned to the specific waste stream by the state regulatory agency. 2.
- Process Generatin Waste Describe the process generating the waste in detail. List the specific process/operation or source that gener ites the waste (e.g., Incineration of municipal refuse, aspectos removal, wastewater treatment, building meintenanc ).

At a minimum, the G ineretor should answer the following questions in determining the process generating the waste.

- What chemical are stored and/or used at the facility? Is the waste ge rerated from the production/manufacturing of any of the following industries: wood preservation;
- inorganic pign: ints; organic pigments; pesticides; explosives; petroleum refining; iron and steel, copper, lead or 2inc production?
- is the waste a isult from degreasing, solvent parts cleaning, recovery/reclaiming of solvents (bottoms), wastewater treatment (sluc jes), or electropiating?
- Estimated Annual 1 plume Approximate volume in tons, yards, or other (e.g., drums, gallons) that will be received by the ultimate management facility. This volume amount is not intended for use in complying with state and/or permit restrictions.
- 5. Personal Protective Equipment Requirements - All personal protective equipment that is necessary to safely manage the waste & eam.
- 6. Transporter/Transil r Station - Transporter and/or transfer station name.
- is this a U.S. Deparment of Transportation (USDOT) hazardous material?-Choose the appropriate response: yes or no. 7.
- Reportable Quantili (lbs.; kgs.) If the answer to 7 is yes, enter the Reportable Quantity (RQ) established by 40 CFR 302.4 or eq. valent Canadian or Mexican regulation for this waste. Indicate the appropriate units for the RQ.
- Hazard Class/ID# If the answer to 7 is yes, indicate the proper USDOT hazard class and identification number.
- 10. USDOT Shipping N me If the answer to 7 is yes, enter the proper USDOT shipping name for the waste.

#### C. Generator's Curtification

Indicate the appropriate it sponse to questions/statements 1, 2, 3, 4, 5, and 6. By signing this Generator's Waste Profile Sheet, the Generator cerl lies the responses are true and accurate with respect to the waste stream(s) listed.

In writing by the generato Title - Enter Employee's i de.

Date - Enter the date this Senerator's Waste Profile Sheet is signed. D. Will Management's ecision To be completed by WMI

Name - Print or Type Emil loyee's name.

Company Name - Comp. my employing the person certifying the Generator's Waste Profile Sheet.

Certification Signature - Signature of an authorized employee of the Generator or representative of the generator if authorized

FOR WMI USE ONLY

Form WMI-4182

810 465 5571

PAGE. 03

4-9-7

Please such to:

Wike Randerson Carlo Environmental 44907 Timby Dr. Bax 744 Chiten Trup MI 48038

810-468-2580

send by overnight Mail

Hould day

#### Memorandum

**DATE:** May 15, 1998

TO: Gary Stanczuk - Chrysler Corporation

FROM: Lester J. Dupes, CPC - Environmental Standards

Rock J. Vitale, CPC - Environmental Standards

**RE:** Dayton Thermal Products SC001, RFA 209

CC: Mike Bratrud - Leggette, Brashears, and

Graham

Discussion of Methylene Chloride Results in Samples East Pit 0'-8' Composite and West Pit 0'-4' Composite Collected on April 21, 1998.

A limited review of the analytical data associated with samples East Pit 0'-8' Composite and West Pit 0'-4' Composite collected on April 21, 1998, at the Chrysler Corporation-Dayton Thermal Products facility was performed by Environmental Standards, Inc. of Valley Forge, Pennsylvania. The purpose of this review was to evaluate the concentrations of methylene chloride reported in these samples to determine if the concentrations of methylene chloride were native to these samples.

The samples were grouped into RFA Number 209 and subcontracted by CompuChem of Cary NC to a Ohio Voluntary Action Program (VAP) certified laboratory. The samples were grouped into Sample Delivery Group (SDG) L9804371 by Kemron Environmental Services of Marietta, Ohio, and they were collectively analyzed for volatile organic compounds by US EPA "Test Methods for Evaluating Solid Waste" (SW-846) Method 5030/8260. The results were reported by the laboratory with information consistent with Chrysler Corporation Level 1 format. This format includes the following data deliverables: Sample Analysis data sheets (Form I's) for site samples, method blanks, and quality control summaries for surrogates and laboratory control sample recoveries, sample receipt information, and Chain-of-Custody documentation. Environmental Standards has performed a limited review of only the methylene chloride results for these samples. This memo should not be construed as a complete review of all data associated with these samples.

The following table lists the laboratory-reported concentrations of methylene chloride and the laboratory applied data qualifier for each sample in SDG L9804371. Comments have been provided in the table to explain the laboratory reported results.

| Sample<br>Identification            | Laboratory Reported<br>Methylene Chloride<br>Results | Laboratory<br>applied<br>qualifiers | Comments   |
|-------------------------------------|--|-------------------------------------|--|
| East Pit 0'-8' Composite            | 1.2 ug/kg  | J                                   | Result is qualified as estimated by the laboratory and marked with a "J:" qualifier to indicate that the quantitated result is below the laboratory reporting limit  |
| West Pit 0'-8' Composite            | 1.6 ug/kg  | · ј                                 | Result is qualified as estimated by the laboratory and marked with a "J:" qualifier to indicate that the quantitated result is below the laboratory reporting limit  |
| TB042198<br>(Trip Blank)            | 3.0 ug/l   | J                                   | Result is qualified as estimated by the laboratory and marked with a "J:" qualifier to indicate that the quantitated result is below the laboratory reporting limit  |
| EB04121981800<br>(Equipment Blank)  | 4.0 ug/l   | J                                   | Result is qualified as estimated by the laboratory and marked with a "J:" qualifier to indicate that the quantitated result is below the laboratory reporting limit  |
| VBLK0423<br>(Solid Method<br>Blank) | ND (<5 ug/kg)  |                                     | Result reported by the laboratory is not detected at or below the laboratory reporting limit. A review of the analysis quantitation report and the mass spectra indicates a qualitatively valid identification at 0.68 ug/kg |

Environmental Standards requested that the laboratory supply a copy of the instrument quantitation report and methylene chloride mass spectra for the solid laboratory method blank. A review of the solid laboratory method blank analytical results by Environmental Standards indicates that a low concentration of methylene chloride (less than the laboratory reporting limit) is present at a concentration of 0.68 ug/kg. In addition, the associated trip and field blanks contain methylene chloride at concentrations greater than the actual sample results. Methylene chloride is a known common laboratory contaminant because it is used in the semivolatile organic extraction procedures (i.e., SW-846 Method 3500 series), which are routinely performed in environmental laboratories. In accordance with USEPA "National Functional Guidelines for Organic Data Review" (US EPA, 2/94), any sample result less than 10 times the highest associated blank result should be considered qualitatively questionable due to blank contamination.

The concentration of methylene chloride in all samples can be attributed to common background laboratory contamination since the investigative samples exhibit similar

concentrations when compared to the concentrations of methylene chloride in all associated laboratory method blanks, trip blanks, and field blanks. Therefore, the methylene chloride results should be considered qualitatively questionable due to laboratory background contamination and should <u>not</u> be considered native to the samples.

### **DAIMLER CHRYSLER**

DaimlerChrysler Corporation

February 2, 2000

Suburban RDF 3415 Township Rd 447 Glenford, OH 43739

Attn: Dan Orvits

Dear Mr. Orvits:

DaimlerChrysler is requesting approval to dispose of contaminated water at your facility. The water was generated from sewer cleaning activities at our Dayton Thermal plant. Based upon knowledge of historical plant operations, it is Chrysler's conclusion that the contamination is not a listed hazardous waste.

Thank you for assistance.

Sincerely,

Joe Whitlock

Fax 740 - 787-1145

Below is the logic used for making the determination for waste disposal at Belvidere. After speaking with Doug Orf and Sue Forest we used the same logic to determine that we do not need to classify contaminated water from the frac tanks at Dayton as a listed waste. The chemicals we have in the water could have come from a paint or other source that would make it a non-listed waste. Therefore, since we have no direct knowledge of the source, we do not have to assume that the chemicals came from a listed source.

Recent investigations relating to proposed construction discovered elevated levels of volatile organic compounds (VOC), Semivolatile organic compounds (SVOC), and total metals in the soil and

One of the decisions that must be made to determine the proper way of treating this contamination is the classification of these wastes. Key to this decision is the origin of the contamination. A due diligence environmental evaluation was conducted to identify the origin of the contaminants. The evaluation consisted of interviews with current and former plant personnel knowledgeable of plant operations and a search of plant records.

The compounds of concern have the potential of being listed by two categories; 1) as a waste from a non-specific source in particular as F001, F002, F003 or F005 or 2) from commercial chemical products under the "U" listed wastes. The compounds identified on site do not relate to and would not be listed under the "K", "P" or remaining "F" listings. Based upon 40 CFR 261.31-3 if a product or compound is part of a manufacturing process waste it is not a "U" listed waste. If the Compounds are not spent halogenated or non-halogenated solvents and/or they contain less than 10% of one or more of those solvent listed in F001, F002, F004, or F005, they are not a F001, F002, F003, or F005 waste. Table 2 identifies the possible sources for the compounds of concerns and for most compounds there are several sources.

The sources of the contamination discovered in the soil and groundwater along the east side of Belvidere Assembly are attributed to incidental spills relating to the handling of waste materials. The materials stored along the east side of the plant include the following: paint wastes, spent purge solvents, gasoline from rejected automobile gasoline tanks, spent cleaning fluids, spent equipment cleaner, and spent line purge. The sample manifests and SARA reports included in this letter show that the compounds listed above were part of manufacturing process wastes, solvents with more and less than 10% of the listed compounds, and sole active ingredients. It is Chrysler's conclusion that the contamination is not a listed hazardous waste. Our investigation indicates that the possible origins of the contamination contained less than 10% of the listed wastes and is from manufacturing process wastes not the raw materials used by the plant.

30(2011000+# 2, 12)002





#### GENERATOR'S WASTE PROFILE SHEET PLEASE PRINT IN INK OR TYPE

| Service Agreement on File? YES  |   | Profile Number: Wi<br>Renewal Date:  | M CM 2898   |
|---|---|--|---|
| Wave General Prince Community     General Name: Deimler C   | bruster 2   | SIC Coda:  |   |
| 5. Facility City:   | SH USAN S.  | Phone: (937) 224-<br>State/Province:<br>Generator USEPA/Federal II<br>State/Province ID #: |   |
|   | Webb 12.  | Customer Phone: 193  | 7) 237-1097<br>237-(85.0<br>[Serine as above                            |
| B. Waste Stream Information   | 3 containinaled   |  |   |
| c. Color d. Strong add<br>(describe):   |   | id Misingle Layer  | g. Free liquid range<br>90 to 100%                                      |
| L. Chemical Composition (List all con   | unitarents functualing halogeneted organics.<br>five analysis):   | □140-199°F □≥ 200°F debris, and UHC's) present in any conce                                | © S to 7.5 %  Most applicable entration and submit  Concentration Range |
| See Analytical  | 4 (* 180 8) (* 11 - 18 SIERT ) DO   | or an exercision .   |   |
|   | this profile contain any of the car  this profile contain dioxins? (flat i this profile contain esbestos?  his profile contain benzene?  ppm  ppm  ne waste operations NESHAP?.  bpart CC controls?  ppi a i or Closs i! ozone-depleting si | Sansitive  | ######################################                                  |
| 2. Quantity of Wasto Estimated Annual Volume 5  | ຼະ <u>ເບ</u> ⊡Tona 🗖  | Yarda □Drums ☑Other (ape   | city) <u>Gallons</u>  |
| 3. Shipping information a. Packeging:  Bulk Solid; Type/Size:  Drum; Type; Size: b. Shipping Frequency: Units c. Is this a U.S. Department of Trans | Per: Mont   | ⊠Bulk Liquid; Type/Size:  ☐Other:  ☐Quarter ☐Year ☐One time Material? If no skind a sent i | n □Diher  |

CCD 64 106 10100

13:31 FAX 1 513 Z31 3669

9972971850;# J/ 5

SENT BY:

waste-mgt.indl. 1-10-0; 9:10 :CHEM WASTE PT.ARTHUR→



#### GENERATOR'S WASTE PROFILE SHEET PLEASE PRINT IN INK OR TYPE

|   | Reportable Quantity (lbs.;kgs.): N A e. Hazard Class/ID #: N   | A  |
|---|--|--|
|   | USDOT Shipping Name: PCB Contaminated Oil Personal Protective Equipment Regularments:  | <del></del>  |
|   | Transporter/Transfer Station: Dryx Industrial Services   |  |
|   |  |  |
| C Ger   | nerator's Certification (Flease chock appropriate responses, sign, and dote below):  |  |
| 1,  | is this a USEPA hazardous waste (40 CFR Part 261)? If the engener is no, skip to 2   | TYES AND   |
|   |  | res inc  |
|   | Composition - B.1.)  | TES IDNO   |
| 2   | identify ALL stells hezardous waste codes  |  |
| 3.  | is the waste from a CERCLA (40 CFR 300. Appendix B) or state mandated clean-up?  |  |
| 4.  | Does the waste represented by this waste profile sheet contain radioactive material, or is disposal regulated by the Nuclear Regulatory Commission?  | OYES PANO  |
| 5.  | Does the wests represented by this wests profile sheet contain concentrations of Potychierinated Biphenyis (PCBs) regulated by 40 CFR 7617 (if yes, list in Chemical Composition - B.1.j)  | EYES DNO   |
|   |  |  |
| <b>8.</b> .   | Do the waste profile sheet and all attachments contain true and accurate descriptions of the waste meterial, and has all relevant information within the possession of the Generator regarding known or auspected hazards permining to the wasse been disclosed to the Contrador?  |  |
| 8.<br>7   | material, and has all relevant information within the possession of the Generator regarding known or   | <i>*</i>   |
| 7   | meterial, and has all relevant information within the possession of the Generator regarding known or awapeded hazards pertaining to the wasse been disclosed to the Contractor?  | 4  |
| Certific  | material, and has all relevant information within the possession of the Generator regarding known or awapected hazards pentaining to the wasse been disclosed to the Contractor?   | Syes DNO  Suthorize WM to obtain a gned signs as authorized y the generator and additional acessary permits and accessary permits accessary permits and accessary permits accessary permits accessary permits and accessary permits accessary perm |
| 7 Checker Any san sample sport of Informat licenses Certific Name (   | material, and has all relevant information within the possession of the Generator regarding known or awapected hazards pertaining to the wasse been disclosed to the Contractor?  With all changes which occur in the character of the waste be identified by the Generator and disclosed to the Contractor prior to providing the waste to the Commactor?  It is a Certificate of Destruction or Disposal is required.  In the submitted is representative as defined in 40 CFR 261 - Appendix I or by using an equivalent method. I from any waste whomeant for purposes of recentification. If this certification is made by a broker, the underset if the generator and has confirmed the information contained in this Profile Sheet from information provided to the generator and has confirmed the information contained in this Profile Sheet from information provided to the seasonably recessary. If approved for management, Contractor has all the restort the waste that has been characteristical and identified by this approved profile.  This:    Company Name:   | Buthorize WM to obtain a gned signs as authorized y the generator and additional acasaary permits and soldinator Date: 2/3/00 attached pages  FCR WM USE ONLY  |
| 7 Checany sample sport of informaticensus Certific Name (   | material, and hes all relevant information within the possession of the Generator regarding known or awapected hazards pertaining to the wasse been disclosed to the Contractor?   | Buthorize WM to obtain a gned signs as authorized y the generator and additional acessary permits and soldinator.  Soldinator Satisched pages  |
| 7 Check Any san sample agent of informat licarstas Certific Name (  7) WM 1.  | material, and hes all relevant information within the possession of the Generator regarding known or awapected hazards pertaining to the wasse been disclosed to the Contractor?   | Buthorize WM to obtain a gned signs as authorized y the generator and additional acasaary permits and soldinator Date: 2/3/00 attached pages  FCR WM USE ONLY  |
| 7 Check Any san sample of Informatilicanses Certific Name (   | material, and hes all relevant information within the possession of the Generator regarding known or awapected hazards pertaining to the wasse been disclosed to the Contractor?   | Buthorize WM to obtain a gned signs as authorized y the generator and additional acasaary permits and soldinator Date: 2/3/00 attached pages  FCR WM USE ONLY  |
| 7 Checan sample agent of Informaticanses Certific Name ( 1. 2. 3.   | white all changes which occur in the character of the waste be identified by the Generator and disclosed to the Contractor?  Write all changes which occur in the character of the waste be identified by the Generator and disclosed to the Contractor prior to providing the waste to the Contractor?  Write all changes which occur in the character of the waste be identified by the Generator and disclosed to the Contractor prior to providing the waste to the Contractor?  Write all changes which occur in the character of the waste be identified by the contractor and disclosed to the Contractor prior to providing the waste in the Contractor in the cartification is made by a broker, the undersite find any waste whomen the purposes of recentification. If this certification is made by a broker, the undersite the greater and has confirmed the information contained in this Profits Sheet from information provided by the approved for management, Contractor has all the rule for the waste that has been characterized and identified by this approved profits.  This:  This:  This:  This:  William Company Name:  Company Name:  Company Name:  Company Name:  Data Characterized and indicate the number of the additional information is situated. Indicate the number of the cautions, Stabilization in Other (Specify)  Proposed Ultimate Management Facility:  Precautions, Special Handling Procedures, or Limitation on Approval:  Waste Form.  5. Source  5. System  Approval Signature:  Date: | Buthorize WM to obtain a gned signs as authorized y the generator and additional acasaary permits and social acasaary permits and social actions of the control of the cont |
| 7 Checker Any san plan plan paper to information licenses Certific Name (  7 WM 1. 2. 3. 4. Special Salespee Division | with all changes which occur in the character of the waste be identified by the Generator and disclosed to the Contractor?  With all changes which occur in the character of the waste be identified by the Generator and disclosed to the Contractor prior to providing the waste to the Contractor?  Ck here if a Certificate of Destruction or Disposal is required.  In the submitted is representative as defined in 40 CFR 281 - Appendix I or by using an equivalent method. I from any waste shipment for purposes of recentification. If this certification is mede by a broker, the undersite of the generator and has confirmed the information contained in this Profile Sheet from information provided to the set that has been characterized and identified by this approved for management, Contractor has all the restriction signature:  (Type or Print):    Check if additional information is attached. Indicate the number of the contractor is additional Handill   Non-hazardous Sciktification   Bioremediation     Waste Form   | Buthorize WM to obtain a gned signs as authorized y the generator and additional acessary permits and surfaced.  Date: 2/3/00 attached pages  ECR WM USE ONLY  Incineration  |

Ppm W80-4153 (9897)



# GENERATOR'S WASTE PROFILE SHEET PLEASE PRINT IN INK OR TYPE

| Se    | rvice Agreement on File?   |                  | Profile Number                          |            |                          |
|-------|--|------------------|---|------------|--------------------------|
|       |  |                  | Renewal Date:                           |            | 1 1                      |
| A.    | Waste Generator Information  |                  |   |            |                          |
|       |  | 2.               | SIC Code:                               |            |                          |
| 1.    | Generator Name: Daimler Chrysler   | • _              |   |            |                          |
| 3.    | Facility Street Address: 1600 Webster St   | . <del>4</del> . | Phone: (937) 3                          | 34-3       | 46 T                     |
| 5.    | Facility City: Dayton  | 6.               | State/Province:                         |            |                          |
| 7.    | Zip/Postal Code: 4 5404  | 8.               | Generator USEPA/Fed                     | etal in #: | EOLPLO OHO               |
| 9.    | County: montgomery   | 10.              |   |            |                          |
| 11.   | Customer Name: Dhyx Industrial   | 12.              |   | 932)       | 237-1097                 |
| _13.  | Customer Contact: Wike Webio   | 14.              | Customer Fax:                           | 937/       | 237-1850                 |
| В.    | Waste Stream Information   |                  |   |            |                          |
| 4     | Name of Words, The Author 1 2 4 1 1 -  |                  | State Wests Code:                       |            |                          |
| 1.    | Name of Waste: PCB Containinated Waters  | <u> </u>         | 2. State Waste Code:                    |            | <u>Pt</u>                |
| 3.    | Process Generating Waste: Sever Cleaning   |                  |   |            |                          |
|       |  |                  |   |            |                          |
|       |  |                  |   |            |                          |
|       |  |                  |   |            |                          |
| 4.    | Estimated Annual Volume: 100,000   | ַ ווי            | ons Tards Other (s                      | specify)   | Galbas                   |
| 5.    | Personal Protective Equipment Requirements:  | ·                |   |            |                          |
| 6.    | Transporter/Transfer Station: Dhyk Industrial  |                  |   |            |                          |
| 7.    | Is this a U.S. Department of Transportation (USDOT) Hazardou   | s Mat            | erial? (If no, skip 8, 9, &             | 10)        | ☐YES MO                  |
| 8.    | Reportable Quantity (lbs.; kgs.): NIA  |                  | Hazard Class/ID #:                      | NIA        | . — —                    |
| 10.   | USDOT Shipping Name: No. Hazardous 12  |                  |   |            | <del></del>              |
|       | Check if additional information is   | attac            | ned. Indicate the number                | r of attac | hed pages:               |
|       | Generator's Certification (Please check appropriate responses.   |                  |   |            |                          |
| Ų.    | derietator 3 dertification (r leade check appropriate responsee.   |                  | and date deligation                     |            |                          |
| 1.    | Is the waste represented by this waste profile sheet a "Hazardous Waste  | e,* es c         | lefined by USEPA, Canadia               | ın,        | •                        |
|       | Mexican and/or state/province regulation, in the location where generate   | d or ul          | timately managed?                       |            | □YES NO                  |
|       |  |                  |   |            | •                        |
| 2     | Does the waste represented by this waste profile sheet contain regulated   | d radio          | active material or regulated            |            | -veo                     |
|       | concentrations of Polychlorinated Biphenyts (PCBs)?  | ******           |   |            | □YES XINO                |
| 3.    | Does this waste profile sheet and all attachments contain true and accur   | ah ete           | continue of the waste                   |            |                          |
| Э.    | malerial?  |                  |   |            | MYES □NO                 |
|       | ((CGGG/Mf)   |                  |   |            | G. 55 G. 10              |
| 4.    | Has all relevant Information within the possession of the Generator regard   | ding kr          | own or suspected hazards                |            |                          |
|       | pertaining to the waste been disclosed to the Contractor?  |                  | *************************************** |            | MYES   NO                |
|       |  |                  |   |            |                          |
| 5.    | Is the analytical data attached hereto derived from testing a representative   | e sam            | ple in accordance with                  |            |                          |
|       | 40 CFR 261.20 (c) or equivalent rules?   |                  |   |            | JNA ØYES □NO             |
| _     | NAMII All attaches attack accounts the above stage of the supple the ideastified by the  |                  |   |            |                          |
|       | Will all changes that occur in the character of the waste be identified by the Contractor prior to providing the waste to the Contractor?  |                  |   |            | XYES   NO                |
|       | Solid dotter providing the plant to the providing the plant to the providing the plant to the pl |                  | <i>K</i> -                              | _          | <i>i</i> .               |
| Carl  | dification Signature: OE Whit OUK AND  |                  | Title: EN                               | 1/25       | dintor                   |
|       | ne (Type or Print): Company  | Nam              |   |            | Date: 2/3/00             |
| 14011 | Company  | 144111           | <sup>6.</sup>                           |            | $-$ Date. $\propto 3/00$ |
| D. N  | WMI Management's Decision  |                  |   | F          | OR WMI USE ONLY          |
| 1,    | Management Method:   Landfill   Solidify   Bioremediation  | DOU              | er (Specify)                            |            |                          |
| 2.    | Proposed Ultimate Management Facility:   |                  |   | ince:      | □NA                      |
| 4.    | Supplemental Information:  |                  | _                                       |            |                          |
|       | · · · · · · · · · · · · · · · · · · ·  |                  | ···                                     |            |                          |
|       |  |                  |   |            |                          |
| 5.    | Precautions, Special Handling Procedures, or Limitations on App  | rovol            |   |            | <del></del>              |
|       | Abb  | nuval.           |   |            |                          |
|       |  |                  | <del></del>                             |            |                          |
| Sne   | cial Waste Decision  |                  | <del></del>                             |            |                          |
| Sale  | sperson's Signature;   | •••••            |   | Approved   | Disapproved              |
|       | ion Approval Signature (Optional):   |                  | Date:                                   |            |                          |
| Spec  | elal Waste Approvals Person Signature:   |                  | Date:                                   |            |                          |
| Oher  | TO THE THE THE TENSOR SIGNATURE:   |                  | Date:                                   |            | }                        |

Fam WMI-4152

248 576 7928

#### TOTAL PAGES

#### TOTAL TIME

 SEND : 0021
 SEND : 00°07'20"

 RECEIVE : 0046
 RECEIVE : 00°20'02"

|    | DATE  | TIME    | TO/FROM             | MODE | MIN/SEC        | PGS         | CMD# | STATUS |
|----|-------|---------|---------------------|------|----------------|-------------|------|--------|
| 01 | 02/01 | . 11:17 | 'CRC                | UFR  | 00'24"         | 002         | 130  | OK     |
| 02 | 02/01 | 11:24   | 815089987025        | S    | 00'00"         | <i>0</i> 00 | 131  | STOP   |
| 03 | 02/01 | 11:30   | 15089987028         | ECS  | 00'47"         | 001         | 133  | 0K     |
| 04 | 02/01 | 11:34   | 87732542            | G3S  | 00'37"         | 001         | 134  | OK     |
| Ø5 | 02/01 | 11:38   | 216 621 4616        | ECR  | 00'23"         | 001         | 130  | OK     |
| Ø6 | 02/01 | 11:40   | 713 210 5030        | ECR  | 00'46"         | 002         | 130  | OK     |
| 07 | 02/01 | 11:51   | DAIMLERCHRYSLER ENG | UFR  | 01'18"         | 005         | 130  | OK     |
| 08 | 02/01 | 12:42   | 414 359 5679        | ECS  | 00'36"         | 002         | 135  | OΚ     |
| 09 | 02/01 | 13:16   | 816168766709        | S    | 00'00"         | 000         | 136  | STOP   |
| 10 | 02/01 | 13:17   | 816178766709        | ECS  | 00'21"         | 001         | 138  | 0K     |
| 11 | 02/01 | 14:27   | ·                   | ECR  | 02'00 <b>"</b> | 002         | 139  | OK     |
| 12 | 02/01 | 15:43   |                     | ECR  | 03'50 <b>"</b> | 010         | 141  | OK     |
| 13 | 02/01 | 15:54   |                     | ECR  | 03'52 <b>"</b> | 010         | 142  | OK     |
| 14 | 02/01 | 16:20   | Heartland Institute | ECR  | 00'37"         | 001         | 143  | OK     |
| 15 |       |         | 524-4854            |      |                | 009         | 144  | OK     |
| 16 | 02/02 | 07:42   | 817 597 2163        |      |                | 002         | 145  | OK     |
| 17 | 02/02 | Ø8:27   |                     | ECR  | 01'58"         | 004         | 146  | OΚ     |
| 18 | 02/02 | 08:42   | 18105532138         | ECR  | 01'21"         | 003         | 147  | OK     |
| 19 | 02/02 | 08:48   | Christian & Barton  | ECS  | 00'21"         | 001         | 148  | OK     |
| 20 |       |         | 812489261199        |      | 00'00 <b>"</b> | 000         | 149  | BUSY   |
| 21 | 02/02 | 11:14   | Via Fax             | ECR  | 00'48"         | 001         | 151  | OK     |
| 22 |       |         |                     |      | 00'55"         | 002         | 152  | 0K     |
| 23 |       |         | 812489261199        |      | 00'00"         | 000         | 153  | BUSY   |
| 24 |       |         | 13139640168         |      | 01'09"         |             | 155  | OK     |
| 25 | 02/02 | 12:50   | Heartland Institute |      |                |             | 156  | OK     |
| 26 | 02/02 | 13:47   | 740 787 1145        | ECS  | 01'25"         | 004         | 158  | ΩK     |

|                                |                      |                              |   | OHIO EPA TCLP<br>REGULATORY |                      |         |                |                |                   |
|--------------------------------|----------------------|------------------------------|---|-----------------------------|----------------------|---------|----------------|----------------|-------------------|
| ORIGIN                         | SAMPLE ID            | DATESAMP                     | PARAMETER                                       | LEVEL                       | RESULT               | QUAL    |                |                |                   |
|                                | Press#18             |                              | Flash Point for Liquids                         |                             | 142                  |         | F              | LIQUID         | OTHER             |
|                                | Press#18<br>Press#18 | 12/23/99 (<br>12/23/99 (     |   | -<br>5                      | 3.7<br>0.36 <b>5</b> |         | units<br>MG/L  | LIQUID         | OTHER TOLPMETALS  |
|                                | Press#18             | 12/23/99                     |   | 100                         | 14.96                |         | MG/L           | LIQUID         | TCLPMETALS        |
| LIQUID FROM UST                |                      | 12/23/99                     |   | 1                           | 0.035                |         | MG/L           | LIQUID         | TCLPMETALS        |
| NEAR PRESS#18,                 | Press#18             | 12/23/99                     | Chromium  |                             | 277.5                |         | MG/L           | FIGUID         | TCLPMETALS        |
| BLDG 53                        | Press#18             | 12/23/99 1                   |   | 50 M                        | 24.8                 |         | MG/L           | LIQUID         | TCLPMETALS        |
| (LIQUID PUT IN<br>TANKER #261) | Press#18<br>Press#18 | 12/23/99 !                   | Mercury<br>2-Butanone (MEK)                     | 0.2<br>200                  | 0.017<br>12437       |         | MG/L<br>MG/L   | LIQUID         | TCLPMETALS<br>VOC |
| TAINER #201)                   | Press#18             |                              | 4-Methyl-2-Pentanone                            |                             | 1235                 |         | MG/L           | LIQUID         | VOC               |
|                                | Press#18             |                              | Ethyl benzene                                   |                             | 441                  |         | MG/L           | LIQUID         | VOC               |
|                                | Press#18             | 12/23/99 7                   |   |                             | 591                  |         | MG/L           | LIQUID         | VOC               |
|                                | Press#18             |                              | (ylene (Total)                                  |                             | 6319                 |         | MG/L           | LIQUID         | VOC               |
| SOIL NEAR                      | Press#20             | 12/23/99 8                   |   | 100                         | 0.515                |         | MG/L           | SOLID          | METALS            |
| SUIL NEAR<br>PRESS#20, BLDG 5  | Press#20             | 12/23/99 E                   | senzene<br>Fetrachloroethene                    | 500 UG/L<br>700 UG/L        | 6.16<br>22.62        |         | UG/KG<br>UG/KG | SOLID          | VOC<br>VOC        |
| 11200#20, DEDG 0               | Press#20             |                              | (ylene (Total)                                  | 700 0012                    | 5.6                  |         | UG/KG          | SOLID          | VOC               |
| BUILDING 50                    |                      |                              | 7444  |                             |                      |         |                |                |                   |
| SEPERATOR                      | WIPE001              | 12/10/99 F                   | CB-1254   | -                           | 0.37 J               |         | UG/WIPE        | WIPE           | PEST              |
|                                | WL0004               | 11/22/99                     |   |                             | 9 7                  |         | UG/L           | WATER          | HERB              |
|                                | WL0004               | 11/22/99 E                   |   | 100                         | 0.225                |         | MG/L           | WATER          | METALS            |
|                                | WL0004<br>WL0004     | 11/22/99 C<br>11/22/99 C     | Cadmium TR                                      | 1<br>5                      | 0.007<br>0.131       |         | MG/L<br>MG/L   | WATER<br>WATER | METALS<br>METALS  |
|                                | WL0004               | 11/22/99 0                   |   | -<br>-                      | 0.131                |         | MG/L           | WATER          | METALS            |
|                                | WL0004               | 11/22/99 L                   | * *   | 5                           | 0.14                 |         | MG/L           | WATER          | METALS            |
|                                | WL0004               | 11/22/99 N                   | fercury   | 0.2                         | 0.0004               |         | MG/L           | WATER          | METALS            |
|                                | WL0004               |                              | Selenium TR                                     | 1                           | 0.0049-J             |         | MG/L           | WATER          | METALS            |
|                                | WL0004               | 11/22/99 S                   |   | 5                           | 0.0029 J             |         | MG/L           | WATER          | METALS            |
|                                | WL0004<br>WL0004     | 11/22/99 Z                   | lash Point for Liquids                          |                             | 5.42<br>No           | Flash   | MG/L           | WATER<br>WATER | METALS<br>OTHER   |
|                                | WL0004               | 11/22/99 p                   |   | -                           | 7.71                 | r iasii | F              | WATER          | OTHER             |
|                                | WL0004               | 11/22/99 E                   |   | 20                          | 5 24                 |         | UG/L           | WATER          | PEST              |
|                                | WL0004               | 11/22/99 P                   |   |                             | 32.9                 |         | UG/L           | WATER          | PEST              |
| MANHOLE ON                     | WL0004               |                              | 4-Dimethylphenol                                | ••                          | 2 J                  |         | UG/L           | WATER          | SVOC              |
| DOCK#2 OF                      | WL0004               |                              | -Methylnaphthalene                              |                             | 1 J<br>3 J           |         | UG/L           | WATER<br>WATER | SVOC<br>SVOC      |
| BUILDING 40-A                  | WL0004<br>WL0004     | 11/22/99 A                   | cenaphthene<br>othracene                        | ~                           | 3 J                  |         | UG/L<br>UG/L   | WATER          | SVOC              |
| (LIQUID PUT IN                 | WL0004               |                              | enzo(a)anthracene                               | ••                          | 5 J                  |         | UG/L           | WATER          | SVOC              |
| RAC #4109, FIRST<br>BATCH)     | WL0004               |                              | enzo(a)pyrene                                   |                             | 4 J                  |         | UG/L           | WATER          | SVOC              |
| BATCH)                         | WL0004               |                              | enzo(b)fluoranthene                             |                             | 5 J                  |         | UG/L           | WATER          | SVOC              |
|                                | WL0004               |                              | enzo(g,h,i)perylene                             | -                           | 4 J                  |         | UG/L           | WATER          | SVOC              |
|                                | WL0004<br>WŁ0004     |                              | enzo(k)fluoranthene<br>s(2-Ethylhexyl)phthalate |                             | 4 J<br>46            |         | UG/L<br>UG/L   | WATER<br>WATER | SVOC<br>SVOC      |
|                                | WL0004               | 11/22/99 Ca                  |   | _                           | 40<br>4 J            |         | UG/L           | WATER          | SVOC              |
|                                | WL0004               | 11/22/99 CI                  |   | -                           | 8 J                  |         | UG/L           | WATER          | SVOC              |
|                                | WL0004               | 11/22/99 Di                  | benz(a,h)anthracene                             |                             | 1 J                  |         | UG/L           | WATER          | svoc              |
|                                | WL0004               | 11/22/99 Di                  |   |                             | 2 J                  |         | UG/L           | WATER          | SVOC              |
|                                | WL0004               |                              | ethylphthalate                                  | _                           | 15                   |         | UG/L           | WATER          | SVOC              |
|                                | WL0004<br>WL0004     | 11/22/99 Flo<br>11/22/99 Flo |   | -                           | 20<br>4 J            |         | UG/L<br>UG/L   | WATER<br>WATER | SVOC<br>SVOC      |
|                                | WL0004               |                              | deno(1,2,3-cd)pyrene                            |                             | 3 J                  |         | UG/L           |                | SVOC              |
|                                | WL0004               | 11/22/99 Ph                  |   |                             | 25                   |         | UG/L           |                | svoc              |
|                                | WL0004               | 11/22/99 Py                  | rene  |                             | 15                   |         | UG/L           | WATER          | svoc              |
|                                | WL0004               | 11/22/99 Ac                  |   |                             | 7 J                  |         | UG/L           |                | voc               |
|                                | WL0005               |                              | senic (fumace method)                           | -                           | 1.21 J               |         | MG/KG          |                | METALS            |
|                                | WL0005<br>WL0005     | 11/23/99 Ba<br>11/23/99 Ca   |   |                             | 6.04 J<br>0.69 J     |         | MG/KG<br>MG/KG |                | METALS<br>METALS  |
|                                | WL0005               | 11/23/99 Ca                  |   | -                           | 0.69 J<br>40         |         | MG/KG<br>MG/KG |                | METALS            |
|                                | WL0005               | 11/23/99 Co                  |   | _                           | 137                  |         | MG/KG          |                | METALS            |
|                                | WL0005               | 11/23/99 Les                 | • •   | -                           | 146                  |         | MG/KG          |                | METALS            |
| 101 (BUILDING 50               | WL0005               | 11/23/99 Me                  | •   |                             | 0.0378 J             |         | MG/KG          |                | METALS            |
| SEPERATOR)                     | WL0005               | 11/23/99 Silv                |   |                             | 1.13 J               |         | MG/KG          |                | METALS            |
| -                              | WL0005               | 11/23/99 Zin                 |   | -                           | 75<br>No E           |         | MG/KG          |                | METALS            |
|                                | WL0005<br>WL0005     |                              | sh Point for Liquids<br>Metals Digestion        |                             | No ⊦<br>99.5         |         | F<br>NO PRINT  |                | OTHER<br>OTHER    |
|                                | WL0005<br>WL0005     | 11/23/99 OII<br>11/23/99 pH  | •   | <del></del>                 | 99.5<br>6.2          | '       |                |                | OTHER             |
|                                | WL0005               | 11/23/99 PC                  |   | 3                           | 260000               | (       |                |                | PEST              |
|                                | WL0006               | 11/30/99 2,4                 |   | 1000                        | 0.34 J               |         |                |                | HERB              |
| ,                              | WL0006               | 11/30/99 2,4                 | -D  | 10000                       | 4.5 J                | ·       | JG/L           | WATER I        | HERB              |
|                                | WL0006               | 11/30/99 Ars                 |   | 5                           | 0.062                |         |                |                | METALS            |
|                                | WL0006               | 11/30/99 Bar                 | um IR   | 100                         | 0.297                | N       | MG/L           | WATER I        | METALS            |
|                                | WL0006               | 11/30/99 Cad                 |   | 1                           | 0.041                |         |                |                | METALS            |

| ORIGIN                            | SAMPLE ID        | DATESAMP                 | PARAMETER  | OHIO EPA TCLP<br>REGULATORY<br>LEVEL | RESULT      | QUAL UNI     | TS MATRIX      | K GRO        |
|-----------------------------------|------------------|--------------------------|--|--------------------------------------|-------------|--------------|----------------|--------------|
| Onidia                            | WL0006           |                          |  | LEVEL                                | 1.46        | MG/L         | WATER          | METALS       |
|                                   | WL0006           | 11/30/99 C<br>11/30/99 L |  | 5                                    | 0.037       | MG/L         | WATER          | METALS       |
|                                   | WL0006           |                          | Selenium TR  | 1                                    | 0.052       | MG/L         | WATER          | METALS       |
|                                   | WL0006           | 11/30/99 Z               | the state of the s | -                                    | 3.32        | MG/L         | WATER          | METALS       |
|                                   | WL0006           |                          | lash Point for Liquids   | _                                    |             | lo Flash F   | WATER          | OTHER        |
|                                   | WL0006           | 11/30/99 p               | •  |                                      | 4.37        |              | WATER          | OTHER        |
| WASTE LIGHTS                      | WL0006           | 11/30/99 P               |  |                                      |             | UG/L         | WATER          | PEST         |
| WASTE LIQUID<br>FROM MANHOLE N    | ₩£0006           | 11/30/99 1               | ,2-Dichlorobenzene   |                                      | 16          | UG/L         | WATER          | SVOC         |
|                                   |                  | 11/30/99 1               | ,4-Dichlorobenzene   |                                      | 1 J         | UG/L         | WATER          | SVOC         |
| OF POLE E13D12 II<br>BUILDING 40. | WL0006           | 11/30/99 2               | -Chloronaphthalene   |                                      | 29          | UG/L         | WATER          | SVOC         |
| DRAINED TO                        | WL0006           | 11/30/99 2               | -Methylnaphthalene   | -                                    | 4 J         | UG/L         | WATER          | SVOC         |
| WASTE                             | WL0006           | 11/30/99 bi              | is(2-Ethylhexyl)phthalate  |                                      | 17          | UG/L         | WATER          | svoc         |
| TREATMENT AS                      | WL0006           | 11/30/99 D               | iethylphthalate  |                                      | 4 J         |              | WATER          | SVOC         |
| PER J. WHITLOCK                   | WL0006           | 11/30/99 N               | laphthalene  |                                      | . 10 J      |              | WATER          | SVOC         |
|                                   | WL0006           |                          | l-Nitrosodiphenylamine   |                                      | 2 J         |              | WATER          | SVOC         |
|                                   | WL0006           |                          | henanthrene  | -                                    | 2 J         | UG/L         | WATER          | SVOC         |
|                                   | WL0006           |                          | ,1-Dichloroethane  |                                      | 260         | UG/L         | WATER          | voc          |
|                                   | WL0006           |                          | ,2-Dichloroethane  | 500                                  | 16 J        | UG/L         | WATER          | VOC          |
|                                   | WL0006           | 11/30/99 2-              |  | 200000                               | 47 J        | UG/L         | WATER          | voc          |
|                                   | WL0006           | 11/30/99 2-              |  |                                      | 36 J        | UG/L         | WATER          | VOC          |
|                                   | WL0006           | 11/30/99 A               |  |                                      | 66 J        | UG/L         | WATER          | VOC          |
|                                   | WL0006           |                          | hloroethane  |                                      | 22 J        | UG/L         | WATER          | VOC          |
|                                   | WL0006           |                          | s-1,2-Dichloroethene   | 700                                  | 15 J        | UG/L         | WATER          | voc          |
|                                   | WL0006           |                          | etrachloroethene   | 700<br>                              | 24 J        | UG/L         | WATER<br>WATER | VOC          |
|                                   | WL0006<br>WL0006 | 11/30/99 To              | oiuene<br>richloroethene   | 500                                  | 280<br>35   | UG/L<br>UG/L | WATER          | VOC          |
|                                   | WL0006           |                          | ylene (Total)  | 500                                  | 38          | UG/L         | WATER          | VOC          |
|                                   | WL0007           | 12/9/99 A                |  | 5 MG/L                               | 0.79 J      | MG/KG        |                | METALS       |
| PRODUCT SAMPLE                    |                  | 12/9/99 B                |  | 100 MG/L                             | 2.21 J      | MG/KG        |                | METALS       |
| FROM BLDG 50                      | WL0007           | 12/9/99 CI               |  | 5 MG/L                               | 3.9 J       | MG/KG        | WATER          | METALS       |
| SUMP, NEAR                        | WL0007           | 12/9/99 Co               |  |                                      | 258         | MG/KG        | WATER          | METALS       |
| MIDDLE OF 50C                     | WL0007           | 12/9/99 Le               |  | 5 MG/L                               | 49          | MG/KG        | WATER          | METALS       |
| (NOT PUT IN A                     | WL0007           | 12/9/99 M                |  | 0.2 MG/L                             | 0.0053 J    | MG/KG        | WATER          | METALS       |
| FRAC)                             | WL0007           | 12/9/99 Si               | •  | 5 MG/L                               | 1.78 J      | MG/KG        | WATER          | METALS       |
|                                   | WL0007           | 12/9/99 Zir              |  |                                      | 33          | MG/KG        | WATER          | METALS       |
|                                   | WL0008           | 12/9/99 2,4              |  |                                      | 0.0166 J    | UG/L         | WATER          | HERB         |
| WATER CAMPLE                      | WL0008           | 12/9/99 2,4              | 4,5-TP   | 1000                                 | 0.0275 J    | UG/L         | WATER          | HERB         |
| WATER SAMPLE<br>FROM PLANT/CITY   | WL0008           | 12/9/99 An               | senic TR   | 5                                    | 0.02        | MG/L         | WATER          | METALS       |
| STORM SEWER                       | WL0008           | 12/9/99 Ba               | irium TR   | 100                                  | 0.205       | MG/L         | WATER          | METALS       |
| NTERSECTION AT                    | WL0008           | 12/9/99 Co               | pper TR  |                                      | 0.0725      | MG/L         | WATER          | METALS       |
| EBSTER ST. (NOT                   | WL0008           | 12/9/99 Le               |  | 5                                    | 0.228       | MG/L         | WATER          | METALS       |
| PUT IN A FRAC)                    | WL0008           | 12/9/99 Zir              |  |                                      | 0.982       | MG/L         | WATER          | METALS       |
| 10111111101                       | WL0008           | 12/9/99 DE               |  | -                                    | 0.0078 J    | UG/L         | WATER          | PEST         |
|                                   | WL0008           | 12/9/99 DE               |  |                                      | 0.0143 J    | UG/L_        | WATER          | PEST         |
|                                   | WL0009           |                          | sh Point for Liquids   | -                                    |             | served DEGRE |                | OTHER        |
|                                   | WL0009           | 1/7/00 pH                |  |                                      | 7.55        |              | WATER          | OTHER        |
|                                   | WL0009           | 1/7/00 Ba                |  | 100                                  | 0.13        | MG/L         | WATER          | METALS       |
|                                   | WL0009           |                          | romium TR  | 5                                    | 0.0054      | MG/L         | WATER          | METALS       |
|                                   | WL0009           | 1/7/00 Co                | • •  | _                                    | 0.207       | MG/L         | WATER          | METALS       |
|                                   | WL0009           | 1/7/00 Lea               |  | 5                                    | 0.338       | MG/L         | WATER          | METALS       |
|                                   | WL0009           | 1/7/00 Zin               |  | -                                    | 0.398       | MG/L         | WATER          | METALS       |
|                                   | WL0009           | 1/7/00 Me                | •  | 0.2                                  | 0.00033     | MG/L         | WATER          | METALS       |
|                                   | WL0009           | 1/7/00 He                |  | 8                                    | 0.0022 J    | UG/L         | WATER          | PEST         |
|                                   | WL0009           |                          | ptachlor Epoxide   | 8                                    | 0.0087 J    | UG/L         | WATER          | PEST         |
| NAIPHSAMPIE                       | WL0009           | 1/7/00 2,4               |  |                                      | 0.03 J      | UG/L         | WATER          | HERB         |
| ROM LINE 40A IN                   | WL0009           | 1/7/00 Chi               |  | 6000                                 | 4 J         | UG/L         | WATER          | VOC          |
|                                   | WL0009           |                          | modichloromethane  | -                                    | 4 J         | UG/L         | WATER          | VOC          |
| OF BLDG 40                        | WL0009           |                          | romochloromethane  | -                                    | 4 J         | UG/L         | WATER          | VOC          |
|                                   | WL0009           | 1/7/00 Bro               |  |                                      | 1 J         | UG/L         | WATER          | VOC          |
|                                   | WL0009<br>WL0009 |                          | thylene Chloride<br>1,2-Dichloroethene   |                                      | 310         | UG/L         | WATER          | VOC          |
|                                   | WL0009           |                          | 1,2-Dichloroethene   | <br>500                              | 200<br>37   | UG/L         |                | VOC<br>VOC   |
|                                   |                  |                          | nioroetnene<br>rachloroethene  | 700                                  | 37          | UG/L         |                |              |
|                                   | WL0009<br>WL0009 | 1/7/00 Teti              |  | 700                                  | 5<br>2 J    | UG/L         |                | VOC<br>SVOC  |
|                                   | WL0009           | 1/7/00 Phe               |  |                                      |             | UG/L         |                |              |
|                                   | WL0009           |                          |  | -                                    | 3 J<br>2 J  | UG/L         |                | SVOC         |
|                                   | WL0009<br>WL0009 | 1/7/00 Pyn               |  | -                                    |             | UG/L         |                | SVOC<br>SVOC |
|                                   | WL0009           | 1/7/00 Ben<br>1/7/00 Chr | zo(a)anthracene  | _                                    | 1 3         | UG/L         |                | SVOC         |
|                                   | WL0009           |                          | •  | -                                    | 1 J<br>1 J  | UG/L         |                | SVOC         |
|                                   | WL0009           | 1/12/00 Ben              | zo(b)fluoranthene  |                                      |             | UG/L         |                |              |
|                                   | WL0010<br>WL0010 | •                        | hylene Chloride  |                                      | 9.18<br>120 | uea          |                | OTHER<br>VOC |
|                                   | WE0010<br>WE0010 |                          | •  |                                      |             | UG/L         |                |              |
| TOWN OLUMBER 1                    | **LUU1U          | 1/12/00 Bari             | um i 🗖   | 100                                  | 0.244       | MG/L         | WATER          | METALS       |

| <u>-</u>                          |                         |                            |                                      | OHIO EPA TCLP            |                   |      |               |                |                  |
|-----------------------------------|-------------------------|----------------------------|--------------------------------------|--------------------------|-------------------|------|---------------|----------------|------------------|
|                                   |                         |                            |                                      | REGULATORY               |                   |      |               |                |                  |
| ORIGIN                            | SAMPLE ID               | DATESAMP                   | PARAMETER                            | LEVEL                    | RESULT            | QUAL | UNITS         | MATRIX         | GROUP            |
| TRUCKS.                           | WL0010                  |                            | Lead TR                              | 5                        | 0.012             |      | MG/L          | WATER          | METALS           |
| PRELIMINARY.<br>STILL WAITING FOR | WL0010                  |                            | Zinc TR<br>2,4,5-TP                  | 1000                     | 0.311<br>0.02 J   |      | MG/L<br>UG/L  | WATER          | METALS<br>HERB   |
| PCB AND                           | WL0010                  | 1/12/00                    |                                      | 1000<br>                 | 0.0203 J          |      | UG/L          | WATER          | HERB             |
| PESTICIDE                         | WL0010                  | 1/12/00                    |                                      |                          | 17 J              |      | UG/L          | WATER          | SVOC             |
| RESULTS.                          | WL0010                  | 1/12/00                    | Naphthalene                          | -                        | 4100              |      | UG/L          | WATER          | svoc             |
|                                   | WL0010                  |                            | 2-Methylnaphthalene                  |                          | 120               |      | UG/L          | WATER          | SVOC             |
|                                   | WL0011                  | 1/12/00                    | •                                    | -                        | 10.6              |      |               | WATER          | OTHER            |
|                                   | WL0011<br>WL0011        |                            | Acetone                              | 200000                   | 320<br>76         |      | UG/L<br>UG/L  | WATER<br>WATER | VOC              |
|                                   | WL0011                  |                            | 2-Butanone (MEK) Trichloroethene     | 500                      | 3 J               |      | UG/L          | WATER          | VOC              |
|                                   | WL0011                  |                            | 4-Methyl-2-Pentanone                 |                          | 80                |      | UG/L          | WATER          | VOC              |
|                                   | WL0011                  |                            | 2-Hexanone                           |                          | 10                |      | UG/L          | WATER          | voc              |
|                                   | WL0011                  |                            | Xylene (Total)                       | -                        | 3 J               |      | UG/L          | WATER          | VOC              |
|                                   | WL0011                  |                            | Barium TR                            | 100                      | 0.0468            |      | MG/L          | WATER          | METALS           |
| FROM SLUDGE                       | WL0011                  |                            | Cadmium TR                           | 1                        | 0.0031            |      | MG/L          | WATER          | METALS           |
| DRUMS FROM VAC<br>TRUCKS.         |                         |                            | Copper TR<br>Lead TR                 | <br>5                    | 0.0241<br>0.127   |      | MG/L<br>MG/L  | WATER<br>WATER | METALS<br>METALS |
| PRELIMINARY.                      | WL0011<br>WL0011        | 1/12/00                    |                                      | 5<br>                    | 5.74              |      | MG/L<br>MG/L  | WATER          | METALS           |
| STILL WAITING FOR                 |                         | 1/12/00                    |                                      | 0.2                      | 0.00012 J         |      | MG/L          | WATER          | METALS           |
| PCB AND                           | WL0011                  |                            | Chromium                             | 5                        | 0.0275 J          |      | MG/L          | WATER          | METALS           |
|                                   | WL0011                  | 1/12/00                    |                                      | 10000                    | 0.67              |      | UG/L          | WATER          | HERB             |
|                                   | WL0011                  | 1/12/00                    |                                      | 1000                     | 0.065             |      | UG/L          | WATER          | HERB             |
|                                   | WL0011                  | 1/12/00                    |                                      | -                        | 1100              |      | UG/L          | WATER          | SVOC             |
|                                   | WL0011                  |                            | 2-Methylphenol                       | _                        | 3 J               |      | UG/L          | WATER          | SVOC             |
|                                   | WL0011                  |                            | 4-Methylphenol<br>2,4-Dimethylphenol |                          | 750<br>5 J        |      | UG/L<br>UG/L  | WATER<br>WATER | SVOC<br>SVOC     |
|                                   | WL0011<br>WL0011        |                            | 2,4-Dimetrytphenoi<br>Naphthalene    |                          | 3 7               |      | UG/L          | WATER          | SVOC             |
|                                   | WL0011                  |                            | N-Nitrosodiphenylamine               |                          | 2 J               |      | UG/L          | WATER          | SVOC             |
|                                   | WL0011                  |                            | bis(2-Ethylhexyl)phthalate           | ••                       | 2 J               |      | UG/L          | WATER          | svoc             |
|                                   | WL0012                  | 1/18/00                    | ρH                                   | _                        | 7.19              |      |               | WATER          | OTHER            |
|                                   | WL0012                  |                            | 2-Butanone (MEK)                     | 200000                   | 26                |      | UG/L          | WATER          | voc              |
|                                   | WL0012                  |                            | Barium TR                            | 100                      | 0.0792            |      | MG/L          | WATER          | METALS           |
| WAIFR                             | WL0012                  | 1/18/00 1                  |                                      | 5                        | 0.0091 J          |      | MG/L          | WATER          | METALS           |
| COLLECTED FROM                    | WL0012<br>WL0012        | 1/18/00 2<br>1/18/00 2     |                                      | 10000                    | 0.151<br>0.287 J  |      | MG/L<br>UG/L  | WATER<br>WATER | METALS<br>HERB   |
| LUCILLE PUMP                      | WL0012                  | 1/18/00 2                  |                                      | 1000                     | 0.022 J           |      | UG/L          | WATER          | HERB             |
| STATION. ,                        | WL0012                  |                            | I-Chloro-3-methylphenol              |                          | 19                |      | UG/L          | WATER          | SVOC             |
| PRELIMINARY.                      | WL0012                  |                            | Beta-BHC                             |                          | 0.0063 J          |      | UG/L          | WATER          | PEST             |
| •                                 | WL0012                  | 1/18/00 F                  | leptachlor Epoxide                   | 8                        | 0.0064 J          |      | UG/L          | WATER          | PEST             |
|                                   | WL0012                  |                            | ndosulfan I                          |                          | 0.321             |      | UG/L          | WATER          | PEST             |
|                                   | WL0012                  | 1/18/00 [                  |                                      |                          | 0.0173 J          |      | UG/L          | WATER          | PEST             |
|                                   | WL2611                  | 12/20/99 2<br>12/20/99 2   |                                      | 1000                     | 0.563<br>0.0471 J |      | UG/L<br>UG/L  | WATER<br>WATER | HERB<br>HERB     |
|                                   | WL2611<br>WL2611        | 12/20/99 2                 |                                      | 10000                    | 1.86              |      | UG/L          | WATER          | HERB             |
|                                   | VL2611                  | 12/20/99 E                 | •                                    | 100                      | 0.175             |      | MG/L          | WATER          | METALS           |
|                                   | VL2611                  |                            | admium TR                            | 1                        | 0.0063            |      | MG/L          | WATER          | METALS           |
| V                                 | VL2611                  | 12/20/99 C                 | Chromium                             | 5                        | 0.214             |      | MG/L          | WATER          | METALS           |
|                                   | VL2611                  | 12/20/99 C                 |                                      |                          | 0.204             |      | MG/L          | WATER          | METALS           |
|                                   | VL2611                  | 12/20/99 L                 |                                      | 5                        | 0.252             |      | MG/L          | WATER          | METALS           |
|                                   | VL2611                  | 12/20/99 N                 |                                      | 0.2                      | 0.00321           |      | MG/L          | WATER          | METALS           |
|                                   | VL2611<br>VL2611        | 12/20/99 S<br>12/20/99 Z   |                                      | 5                        | 0.0021 J<br>0.962 |      | MG/1.<br>MG/L | WATER<br>WATER | METALS<br>METALS |
|                                   | VL2611<br>VL2611        | 12/20/99 Z<br>12/20/99 P   |                                      | 3 17 17 <b>3</b> \$76.00 | 0.962<br>3.3      |      | VIG/L<br>JG/L | WATER          | PEST             |
|                                   | VL2611<br>VL2611        |                            | -Chioronaphthalene                   | 그 중요 이 보면 설계되었습니다.<br>보다 | 3 J               |      | JG/L          | WATER          | SVOC             |
|                                   | VL2611                  |                            | -Chloro-3-methhylphenol              | _                        | 13                |      | JG/L          | WATER          | SVOC             |
|                                   | VL2611                  |                            | enzo(a)anthracene                    |                          | 2 J               |      | JG/L          | WATER          | SVOC             |
| TANKER TRUCK V                    | VL2611                  | 12/20/99 B                 | enzo(a)pyrene                        |                          | 2 J               |      | JG/L          | WATER          | SVOC             |
| 61 WATER FROM W                   | /L2611                  |                            | enzo(b)fluoranthene                  | -                        | 2 J               |      | JG/L          | WATER          | SVOC             |
| LINE 40A-A                        | /L2611                  |                            | enzo(g,h,i)perylene                  |                          | 1 J               |      |               | WATER          | SVOC             |
| W                                 | /L2611                  |                            | enzo(k)fluoranthene                  | -                        | 1 J               |      |               | WATER          | SVOC             |
|                                   | /L2611<br>/L2611        | 12/20/99 CI<br>12/20/99 FI | •                                    |                          | 2 J<br>5 J        |      |               | WATER          | SVOC<br>SVOC     |
|                                   | /L2611<br>/L2611        |                            | uoramnene<br>deno(1,2,3-cd)pyrene    | -                        | 5 J<br>1 J        |      |               |                | SVOC             |
|                                   | /L2611                  |                            | nenanthrene                          | -                        | 4 J               |      |               |                | SVOC             |
|                                   | /L2611                  | 12/20/99 Pi                |                                      | <br>                     | 130               |      |               |                | SVOC             |
|                                   | L2611                   | 12/20/99 Py                |                                      | ••                       | 4 J               |      |               |                | SVOC             |
|                                   | L2611                   |                            | 1,1-Trichloroethane                  |                          | 35                |      |               |                | voc              |
|                                   | L2611                   | 12/20/99 1,                | 1-Dichloroethane                     |                          | 10                |      |               |                | voc              |
|                                   |                         |                            |                                      |                          |                   |      | O# 1          | MATCH          | VAC              |
|                                   | L2611                   |                            | 1-Dichloroethene                     | 700                      | 2 J               |      |               |                | voc              |
| w                                 | L2611<br>L2611<br>L2611 | 12/20/99 Ad                |                                      | 700<br><br>              | 2 J<br>13 J<br>6  | U    | G/L           | WATER          | VOC<br>VOC       |

|                                   |                     |                              |  | OHIO EPA TCLP<br>REGULATORY  | _                   |          |              |                |                  |
|-----------------------------------|---------------------|------------------------------|--|--|---------------------|----------|--------------|----------------|------------------|
| ORIGIN                            | SAMPLE ID           | DATESAMP                     | PARAMETER                                  | LEVEL  | RESULT              | QUAL     | UNITS        | MATRIX         | GROUP            |
|                                   | WL2611              | 12/20/99                     |  |  | 12                  |          | UG/L         | WATER          | VOC              |
|                                   | WL2611<br>WL2611    |                              | Trichloroethene                            | 500  | 2                   |          | UG/L         | WATER          | voc .            |
|                                   | WL33511             | 11/29/99                     | Xylene (Total)                             | <del>-</del>   | 5<br>3.1            | J        | UG/L<br>UG/L | WATER          | VOC<br>HERB      |
|                                   | WL33511             | 11/29/99                     |  | 10000  | 185                 |          | UG/L         | WATER          | HERB             |
|                                   | WL33511             |                              | Barium TR                                  | 100  | 0.0589              |          | MG/L         | WATER          | METALS           |
|                                   | WL33511             |                              | Cadmium TR                                 | 1 -  | 0.00111             |          | MG/L         | WATER          | METALS           |
|                                   | WL33511<br>WL33511  |                              | Chromium<br>Copper TR                      | 5  | 0.0158<br>0.139     | J        | MG/L<br>MG/L | WATER          | METALS<br>METALS |
|                                   | WL33511             | 11/29/99                     | • •  | 5  | 0.025               |          | MG/L         | WATER          | METALS           |
|                                   | WL33511             | 11/29/99                     |  |  | 0.075               |          | MG/L         | WATER          | METALS           |
|                                   | WL33511             | 11/29/99<br>11/29/99         | Flash Point for Liquids                    | -  |                     | No Flash | F            | WATER          | OTHER            |
|                                   | WL33511<br>WL33511  | •                            | PCB-1254                                   | 327237   | 7.31<br>13.9        |          | UG/L         | WATER<br>WATER | OTHER<br>PEST    |
| FRAC TANK #3351,<br>FIRST SAMPLE, | WL33511             |                              | 2-Methylphenol                             | 300000000000000000000000000000000000000  | 5                   | J        | UG/L         | WATER          | SVOC             |
| RINSE WATER                       | WL33511             |                              | bis(2-Ethylhexyl)phthalate                 | -  | 5                   |          | UG/L         | WATER          | SVOC             |
| FROM BUILDING 40                  | WL33511             |                              | Phenanthrene<br>Phanal                     | -  | 2                   |          | UG/L         | WATER          | SVOC             |
| AND 50.                           | WL33511<br>WL33511  | 11/29/99 (<br>11/29/99 )     | nenoi<br>1,1,1-Trichloroethane             | -  | 3<br>630            | J        | UG/L<br>UG/L | WATER<br>WATER | SVOC<br>VOC      |
|                                   | WL33511             |                              | 1,1,2-Trichloroethane                      | -  | 5                   |          | UG/L         | WATER          | voc              |
|                                   | WL33511             |                              | 1,1-Dichloroethane                         |  | 330                 |          | UG/L         | WATER          | VOC              |
|                                   | WL33511             |                              | 1,1-Dichloroethene                         | 700  | 3 .                 | J        | UG/L         | WATER          | voc              |
|                                   | WL33511<br>WL33511  | 11/29/99 /                   | 2-Butanone<br>Acetone                      | 200000   | 10<br>22            |          | UG/L<br>UG/L | WATER<br>WATER | VOC              |
|                                   | WL33511             |                              | Chlorobenzene                              | 100000   | . 2                 | J        | UG/L         | WATER          | voc              |
|                                   | WL33511             |                              | Tetrachloroethene                          | 700  | 19                  |          | UG/L         | WATER          | voc              |
|                                   | WL33511             | 11/29/99 7                   |  |  | 3 .                 | )        | UG/L         | WATER          | VOC              |
|                                   | WL33511<br>WL33511  |                              | Frichloroethene<br>(ylene (Total)          | 500  | 14<br>3 .           |          | UG/L<br>UG/L | WATER<br>WATER | VOC              |
|                                   | WL41011             | 11/23/99 2                   |  |  | 0.101               |          | UG/L         | WATER          | HERB             |
|                                   | WL41011             | 11/23/99 2                   |  | 10000  | 0.183 、             | )        | UG/L         | WATER          | HERB             |
|                                   | WL41011             | 11/23/99 [                   |  | -  | 0.26                |          | UG/L         | WATER          | HERB             |
|                                   | WL41011<br>WL41011  | 11/23/99 E<br>11/23/99 C     |  | 100<br>5   | 0.0628<br>0.032     |          | MG/L<br>MG/L | WATER<br>WATER | METALS<br>METALS |
|                                   | WL41011             | 11/23/99                     | •  | ~  | 0.0126              |          | MG/L         | WATER          | METALS           |
|                                   | WL41011             | 11/23/99 L                   |  | 5  | 0.113               |          | MG/L         | WATER          | METALS           |
|                                   | WL41011             | 11/23/99 S                   |  | 5  | 0.0019 J            | 1        | MG/L         | WATER          | METALS           |
|                                   | WL41011<br>WL41011  | 11/23/99 Z<br>11/23/99 F     | lash Point for Liquids                     |  | 0.45                | lo Flash | MG/L<br>F    | WATER<br>WATER | METALS<br>OTHER  |
|                                   | WL41011             | 11/23/99 p                   | •  |  | 7.43                | or rasii | •            | WATER          | OTHER            |
|                                   | WL41011             |                              | ndrin Aldehyde                             | encompression of the compression | 0.173 J             |          | UG/L         | WATER          | PEST             |
|                                   | WL41011             | 11/23/99 P                   |  | 为特殊。30人的特别   | 52.7                |          | UG/L         | WATER          | PEST             |
|                                   | WL41011<br>WL41011  |                              | -Methylnaphthalene<br>cenaphthene          |  | 5 J<br>2 J          |          | UG/L<br>UG/L | WATER<br>WATER | SVOC<br>SVOC     |
|                                   | WL41011             | 11/23/99 A                   | •  |  | 2 J                 |          | UG/L         | WATER          | SVOC             |
|                                   | WL41011             |                              | enzo(a)anthracene                          |  | 11                  |          | UG/L         | WATER          | SVOC             |
| FIRST SAMPLE                      | WL41011             |                              | enzo(a)pyrene                              |  | 10                  |          |              | WATER          | SVOC             |
| WATER FROM V                      | NL41011<br>NL41011  |                              | enzo(b)fluoranthene<br>enzo(g,h,i)peryfene | -  | 10<br>6 J           |          |              | WATER<br>WATER | SVOC<br>SVOC     |
| HUB DING SO                       | VL41011             |                              | enzo(k)fluoranthene                        | -  | 10                  |          |              | WATER          | SVOC             |
| WIVED WITH EDEE. V                | VL41011             |                              | s(2-Ethylhexyl)phthalate                   | <b>-</b> '   | 5 J                 |          | UG/L         | WATER          | SVOC             |
| PRODUCT) V                        | VL41011             | 11/23/99 C                   | hrysene<br>ibenz(a.h)anthracene            | -  | 14                  |          |              | WATER          | SVOC             |
|                                   | VL41011<br>VL41011  | 11/23/99 Di                  |  | -  | 2 J<br>1 J          |          |              | WATER<br>WATER | SVOC<br>SVOC     |
|                                   | VL41011             | 11/23/99 Fi                  |  |  | 24                  |          |              | WATER          | SVOC             |
|                                   | VL41011             | 11/23/99 FI                  |  | -  | 2 J                 |          |              | WATER          | SVOC             |
|                                   | VL41011             |                              | deno(1,2,3-cd)pyrene                       | - /  | 5 J                 |          |              | WATER          | SVOC             |
|                                   | VL41011<br>VL41011  | 11/23/99 Na<br>11/23/99 Na   | aphthalene<br>Nitrosodiphenylamine         | -  | 1 J<br>1 J          |          |              | WATER<br>WATER | SVOC<br>SVOC     |
|                                   | VL41011             | 11/23/99 Ph                  |  |  | 17                  |          |              |                | SVOC             |
| V                                 | VL41011             | 11/23/99 Py                  | rene                                       |  | 22                  |          |              |                | svoc             |
|                                   | VL41011             |                              | 1,1-Trichloroethane                        | -  | 3 J                 |          |              |                | VOC              |
|                                   | /L41011<br>// 41011 | 11/23/99 1,1<br>11/23/99 Ad  | I-Dichloroethane                           |  | 8                   |          |              |                | VOC              |
|                                   | /L41011<br>/L41011  |                              | etone<br>-1,2-Dichloroethene               | <u>-</u>   | 21<br>110           |          |              |                | voc<br>voc       |
|                                   | /L41011             |                              | trachloroethene                            | 700  | 9                   |          |              |                | voc              |
| W                                 | /L41011             |                              | chloroethene                               | 500  | 4 J                 | Ü        | IG/L I       | WATER          | voc              |
|                                   | /L41011             | 11/23/99 Vir                 | •  | 200  | 160                 |          |              |                | VOC              |
|                                   | /L41011<br>/L49011  | 11/23/99 Xy                  |  | <del>-</del>   | 4 J                 |          |              |                | VOC              |
|                                   | LTJVII              | 11144177 4,4                 | ر - <del>د</del> ر                         |  | 0.0447 J            | u        | IG/L \       | VATER I        | HERB             |
|                                   |                     |                              | .5-TP                                      |  |                     | 11       | G/L V        |                | HERB I           |
| w                                 | /L49011<br>/L49011  | 11/22/99 2,4<br>11/22/99 Dir |  |  | 0.0126 J<br>0.145 J |          |              | VATER I        | HERB<br>HERB     |

|                       |                    |                             |   | OHIO EPA TCLP<br>REGULATORY           |                    |          |              |                |                  |
|-----------------------|--------------------|-----------------------------|---|---------------------------------------|--------------------|----------|--------------|----------------|------------------|
| ORIGIN                | SAMPLE ID          | DATESAMP                    | PARAMETER                                 | LEVEL                                 | RESULT             | QUAL     | UNITS        | MATRIX         |                  |
|                       | WL49011            |                             | Cadmium TR                                | 1                                     | 0.0391             |          | MG/L         | WATER          | METALS           |
|                       | WL49011            |                             | Chromium                                  | 5                                     | 0.06               |          | MG/L         | WATER          | METALS           |
|                       | WL49011<br>WL49011 | 11/22/99 (<br>11/22/99 (    | Copper TR                                 | <br>5                                 | 0.0413             |          | MG/L         | WATER<br>WATER | METALS           |
|                       | WL49011            |                             | Selenium TR                               | 1                                     | 0.428              | .1       | MG/L<br>MG/L | WATER          | METALS<br>METALS |
|                       | WL49011            | 11/22/99                    |   | 5                                     | 0.0032             |          | MG/L         | WATER          | METALS           |
|                       | WL49011            | 11/22/99                    | Zinc TR                                   |                                       | 45.2               |          | MG/L         | WATER          | METALS           |
|                       | WL49011            | 11/22/99                    | Flash Point for Liquids                   | -                                     | ı                  | No Flash | F            | WATER          | OTHER            |
|                       | WL49011            | 11/22/99                    |   | -                                     | 7.4                |          |              | WATER          | OTHER            |
|                       | WL49011            |                             | PCB-1254<br>2-Methylnaphthalene           | 3                                     | 0.92               |          | UG/L         | WATER          | PEST             |
|                       | WL49011<br>WL49011 | •                           | z-wetnymaphukaene<br>Anthracene           | <u>-</u>                              | 2.                 |          | UG/L<br>UG/L | WATER<br>WATER | SVOC<br>SVOC     |
|                       | WL49011            |                             | Benzo(a)anthracene                        |                                       | 6                  |          | UG/L         | WATER          | SVOC             |
| RAC TANK #4109,       |                    |                             | Benzo(a)pyrene                            |                                       | 6 .                |          | UG/L         | WATER          | SVOC             |
| FIRST SAMPLE,         | WL49011            |                             | Benzo(b)fluoranthene                      | -                                     | 9.                 | )        | UG/L         | WATER          | SVOC             |
| WATER FROM            | WL49011            |                             | Benzo(g,h,i)perylene                      | -                                     | 4.                 |          | UG/L         | WATER          | SVOC             |
| UILDING 50 AND        | WL49011            |                             | Benzo(k)fluoranthene                      | -                                     | 4.                 |          | UG/L         | WATER          | SVOC             |
| 3, SOME CHILLER WATER |                    |                             | ois(2-Ethylhexyl)phthalate                | -                                     | 2 J<br>7 J         |          | UG/L         | WATER          | SVOC             |
| WAIEN                 | WL49011<br>WL49011 | 11/22/99 (                  | Dibenz(a,h)anthracene                     | _                                     | 1 3                |          | UG/L         | WATER          | SVOC             |
|                       | WL49011            |                             | Fluoranthene                              | -                                     | 11                 |          | UG/L         | WATER          | SVOC             |
|                       | WL49011            | 11/22/99 F                  |   |                                       | 1 J                |          | UG/L         | WATER          | SVOC             |
|                       | WL49011            |                             | ndeno(1,2,3-cd)pyrene                     |                                       | 5 J                |          | UG/L         | WATER          | SVOC             |
|                       | WL49011            |                             | laphthalene                               | -                                     | 1 J                | <b>;</b> | UG/L         | WATER          | SVOC             |
|                       | WL49011            |                             | henanthrene                               |                                       | 7 J                |          | UG/L         | WATER          | SVOC             |
|                       | WL49011            | 11/22/99 F                  |   | -                                     | 2 J                |          | UG/L         | WATER          | SVOC             |
|                       | WL49011            | 11/22/99 F                  | •   | _                                     | 10                 |          | UG/L         | WATER          | SVOC             |
|                       | WL49011<br>WL49011 |                             | ,1,1-Trichloroethane<br>,1-Dichloroethane |                                       | 3 J<br>14          |          | UG/L<br>UG/L | WATER<br>WATER | VOC              |
|                       | WL49011            |                             | -Butanone (MEK)                           | 200000                                | 5 J                |          | UG/L         | WATER          | voc              |
|                       | WL49011            | 11/22/99 A                  | , ,                                       |                                       | 10 J               |          | UG/L         | WATER          | VOC              |
|                       | WL49011            |                             | is-1,2-Dichloroethene                     | _                                     | 5                  |          | UG/L         | WATER          | VOC              |
|                       | WL49011            | 11/22/99 T                  | etrachloroethene                          | 700                                   | 25                 |          | UG/L         | WATER          | VOC ·            |
|                       | WL49011            | 11/22/99 T                  |   |                                       | 6                  |          | UG/L         | WATER          | VOC              |
|                       | WL49011            |                             | richloroethene                            | 500                                   | 6                  |          | UG/L         | WATER          | voc              |
|                       | WL49011<br>WL41092 | 12/13/99 A                  | ylene (Total)                             | 5                                     | 11                 |          | UG/L<br>MG/L | WATER          | VOC<br>METALS    |
|                       | WL41092<br>WL41092 | 12/13/99 B                  |   | 100                                   | 0.0087 J<br>0.0778 |          | MG/L         | WATER          | METALS           |
|                       | WL41092            |                             | admium TR                                 | 1                                     | 0.007              |          | MG/L         | WATER          | METALS           |
|                       | WL41092            | 12/13/99 C                  | hromium                                   | 5                                     | 0.0171 J           | 1        | MG/L         | WATER          | METALS           |
|                       | WL41092            | 12/13/99 C                  | * *                                       | <del></del>                           | 0.201              |          | MG/L         | WATER          | METALS           |
|                       | WL41092            | 12/13/99 Le                 |   | 5                                     | 0.264              |          | MG/L         | WATER          | METALS           |
|                       | WL41092<br>WL41092 | 12/13/99 M                  | •   | 0.2                                   | 0.00021            |          | MG/L         | WATER          | METALS           |
|                       | WL41092<br>WL41092 | 12/13/99 Zi<br>12/13/99 2.  |   |                                       | 0.456<br>0.0361 J  |          | MG/L<br>JG/L | WATER<br>WATER | METALS<br>HERB   |
|                       | WL41092            | 12/13/99 2                  | •   | 1000                                  | 0.474              |          |              | WATER          | HERB             |
|                       | WL41092            | 12/13/99 2,                 |   | 10000                                 | 0.205 J            |          |              | WATER          | HERB             |
|                       | WL41092            | 12/13/99 PC                 |   | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 5.2                |          |              | WATER          | PEST             |
|                       | WL41092            |                             | 2-Dichlorobenzene                         | -                                     | 1 J                | ι        | JG/L         | WATER          | SVOC             |
| 10 TANK #//100        | WL41092            |                             | Methylphenol                              |                                       | 2 J                |          |              | WATER          | SVOC             |
| COND SAMPLE           | WL41092            |                             | enzo(a)anthracene                         | -                                     | 1 J                |          |              |                | SVOC             |
| ASH WATER             | WL41092<br>WL41092 | 12/13/99 bis<br>12/13/99 Ch | s(2-Ethylhexyl)phthalate                  |                                       | 2 J                |          |              |                | SVOC<br>SVOC     |
|                       | WL41092<br>WL41092 |                             | rysene<br>ethylphthalate                  | <del></del>                           | 1 J<br>3 J         |          |              | WATER<br>WATER | SVOC             |
| AINLY 3.3.            | WL41092            | 12/13/99 Fh                 |   | _                                     | 1 J                |          |              |                | SVOC             |
|                       | VL41092            | 12/13/99 Ph                 |   |                                       | 3 J                |          |              |                | svoc             |
|                       | WL41092            | 12/13/99 Py                 |   |                                       | 3 J                |          |              |                | svoc             |
|                       | VL41092            |                             | 1,1-Trichloroethane                       | _                                     | 60                 |          |              |                | voc              |
|                       | VL41092            | •                           | I-Dichloroethane                          | <u> </u>                              | 16                 |          |              |                | voc              |
|                       | VL41092            |                             | I-Dichloroethene                          | 700                                   | 2 J                |          |              |                | voc              |
|                       | VL41092<br>VL41092 | 12/13/99 2-6<br>12/13/99 Ac | Sutanone (MEK)                            | 200000                                | 7 J                |          |              |                | voc              |
|                       | VL41092<br>VL41092 | 12/13/99 AC<br>12/13/99 Ch  |   | 6000                                  | 24<br>1 J          |          |              |                | voc<br>voc       |
|                       | VL41092<br>VL41092 |                             | thylene chloride                          | -                                     | 1 J<br>12          |          |              |                | VOC              |
|                       | VL41092<br>VL41092 |                             | trachloroethene                           | 700                                   | 7                  |          |              |                | VOC              |
|                       | VL41092            | 12/13/99 Tol                |   | -                                     | 29                 |          |              |                | voc              |
|                       | VL41092            |                             | chloroethene                              | 500                                   | 4 J                |          |              |                | voc              |
|                       | VL41092            | 12/13/99 Xyl                |   |                                       | 9                  |          |              |                | /OC              |
|                       | /L41141            | 12/20/99 2,4                |   |                                       | 0.075              |          |              |                | -lERΒ            |
|                       | /L41141            | 12/20/99 2,4                |   | 1000                                  | 0.345              |          |              |                | HERB             |
| 1.0                   | /L41141            | 12/20/99 2.4                | -n  | 10000                                 | 0.244 J            | 1.50     | G/L V        | VATER I        | HERB             |
|                       | /L41141            | 12/20/99 Bar                |   | 100                                   | 0.0811             |          |              |                | METALS           |

### SEWER CLEANOUT SUMMARY OF POSITIVE DETECTIONS

|                             |                        |             | DADA  | OHIO EPA TCLF<br>REGULATORY            |                        |               |                |                  |
|-----------------------------|------------------------|-------------|---|--|------------------------|---------------|----------------|------------------|
| ORIGIN                      | SAMPLEID               | DATESAMP    | PARAMETER                                     | LEVEL                                  |                        | DUAL UNIT     |                |                  |
|                             | WL41141                |             | Copper TR                                     | -                                      | 0.0297                 | MG/L          | WATER          | METALS           |
| 5040 T4144                  | WL41141                | 12/20/99    |   | 5                                      | 0.072                  | MG/L          | WATER          | METALS<br>METALS |
| FRAC TANK #4114             |                        | 12/20/99    | •   | 0.2                                    | 0.00021                | MG/L          | WATER          |                  |
| FIRST SAMPLE,<br>WATER FROM | WL41141                | 12/20/99    |   | 3                                      | 0.843<br>2.19 J        | MG/L<br>UG/L  | WATER<br>WATER | METALS<br>PEST   |
| BLDG 40 SUMP AN             | WL41141                |             | PCB-1254<br>2-Chloronaphthalene               |  | 2.19 J                 | UG/L          | WATER          | SVOC             |
| LINE 40E                    | WL41141                |             | 1,1,1-Trichloroethane                         |  | 22                     | UG/L          | WATER          | VOC              |
| CINE TOE                    | WL41141                |             | 1,1-Dichloroethene                            | 700                                    | 1 J                    | UG/L          | WATER          | VOC              |
|                             | WL41141                |             | 1,1-Dichlorgethane                            | ~                                      | 6                      | UG/L          | WATER          | VOC              |
|                             | WL41141                |             | 2-Butanone (MEK)                              | 200000                                 | 4 J                    | UG/L          | WATER          | VOC              |
|                             | WL41141                | 12/20/99    | , ,   | -                                      | 11 J                   | UG/L          | WATER          | VOC              |
|                             | WL41141                | 12/20/99    | Methylene chloride                            | _                                      | 6                      | UG/L          | WATER          | VOC              |
|                             | WL41141                | 12/20/99    | Tetrachloroethene                             | 700                                    | 2 J                    | UG/L          | WATER          | voc              |
|                             | WL41141                | 12/20/99    | Trichloroethene                               | 500                                    | 2 J                    | UG/L          | WATER          | voc              |
|                             | WL41171                | 1/6/00      | 2,4-D   | 10000                                  | 2.9 J                  | UG/L          | WATER          | HERB             |
|                             | WL41171                | 1/6/00      | 2,4,5-TP                                      | 1000                                   | 0.26 J                 | UG/L          | WATER          | HERB             |
|                             | WL41171                |             | Dinoseb                                       | , <del>-</del>                         | 0.98 J                 | UG/L          | WATER          | HERB             |
|                             | WL41171                | 1/6/00      | • •   | -                                      | 2.45                   | UG/L          | WATER          | HER8             |
|                             | WL41171                |             | Arsenic TR                                    | 5                                      | 0.0097 J               | MG/L          | WATER          | METALS           |
|                             | WL41171                |             | Chromium                                      | 5                                      | 0.787                  | MG/L          | WATER          | METALS           |
|                             | WL41171                |             | Barium TR                                     | 100                                    | 0.461                  | MG/L          | WATER          | METALS           |
|                             | WL41171                |             | Cadmium TR                                    | 1                                      | 0.0105                 | MG/L          | WATER          | METALS           |
|                             | WL41171                |             | Copper TR                                     | -                                      | 0.793                  | MG/L          | WATER          | METALS           |
|                             | WL41171                |             | ead TR  | 5                                      | 1.26                   | MG/L          | WATER          | METALS           |
| FRAC TANK 4117,             |                        |             | Silver TR                                     | 5                                      | 0.0187                 | MG/L          | WATER          | METALS           |
| FIRST SAMPLE                | WL41171                | 1/6/00 2    |   |  | 13.1                   | MG/L          | WATER          | METALS           |
|                             | WL41171                | 1/6/00 N    | •   | 0.2                                    | 0.0015                 | MG/L          | WATER          | METALS           |
|                             | WL41171                |             | lash Point for Liquids                        |  |                        | erved DEGREI  |                | OTHER            |
|                             | WL41171                | 1/6/00 p    |   | The market with the second             | 7.65                   | Courses and a | WATER          | OTHER            |
|                             | WL41171                |             | CB-1254                                       | 3777                                   | 370 J                  |               | WATER          | PEST             |
|                             | WL41171                | 1/6/00 [    |   |  | 83<br>830 J            | UG/L<br>UG/L  | WATER<br>WATER | PEST<br>SVOC     |
|                             | WL41171                |             | is(2-Ethylhexyl)phthalate                     | -                                      | 2900                   | UG/L          | WATER          | SVOC             |
|                             | WL41171<br>WL41171     |             | lutylbenzylphthalate<br>is-1,2-Dichloroethene |  | 2900<br>4 J            | UG/L          | WATER          | VOC              |
|                             | WL41171                |             | -Butanone                                     | 200000                                 | 6 J                    | UG/L          | WATER          | VOC              |
|                             | WL41171                | 1/6/00 A    |   | 200000                                 | 22                     | UG/L          | WATER          | VOC              |
|                             | WS00002 TCLP NVE       |             | rsenic TR                                     | 5                                      | 0.007 J                | MG/L          | WATER          | METALS           |
|                             | WS00002 TCLP NVE       | 12/5/99 B   |   | 100                                    | 0.0348                 | MG/L          | WATER          | METALS           |
|                             | WS00002 TCLP NVE       |             | admium TR                                     | 1                                      | 0.006                  | MG/L          | WATER          | METALS           |
|                             | WS00002 TCLP NVE       | 12/5/99 L   |   | 18958 <b>5</b> 1897                    | 0.000<br>≦13 <b>90</b> | MG/L          | WATER          | METALS           |
|                             | WS00002 TCLP NVE       |             | elenium TR                                    | - 6 5 47 (255 <b>4</b> ) +1 +63, ≥<br> | 0.0095 J               | MG/L          | WATER          | METALS           |
|                             | WS00002 TCLP NVE       | 12/5/99 Z   |   | -                                      | 1.62                   | MG/L          | WATER          | METALS           |
| SOLDER SAMPLE               | TCLP NVE Tumbler Blank |             | rsenic TR                                     | 5                                      | 0.0086 J               | MG/L          | WATER          | METALS           |
| FROM LINE 50C               | TCLP NVE Tumbler Blank |             | arium TR                                      | 100                                    | 0.02                   | MG/L          | WATER          | METALS           |
|                             | TCLP NVE Tumbler Blank |             | opper TR                                      |  | 0.0058                 | MG/L          | WATER          | METALS           |
|                             | TCLP NVE Tumbler Blank |             | ead TR  | 5                                      | 0.017                  | MG/L          | WATER          | METALS           |
|                             | TCLP NVE Tumbler Blank |             | elenium TR                                    | 1                                      | 0.0074 J               | MG/L          | WATER          | METALS           |
|                             | TCLP NVE Tumbler Blank |             | lver TR                                       | 5                                      | 0.0057                 | MG/L          | WATER          | METALS           |
|                             | TCLP NVE Tumbler Blank | Zi          | nc TR   | <u> -</u>                              | 0.011 J                | MG/L          | WATER          | METALS           |
|                             | WS00003                | 1/11/00 M   | oisture                                       |  | 16.6                   | % BY WT       | . SLUDGE       | OTHER            |
|                             | WS00003                | 1/11/00 pl  | †   |  | 10.4                   | ρН            | SLUDGE         | OTHER            |
|                             | WS00003                | 1/11/00 lg  | nitability                                    | -                                      | Did Not Ignite         | ÷             | SLUDGE         | OTHER            |
| SI LIDGE CAMPIE             | WS00003                | 1/11/00 PC  |   | 3 UG/L                                 | 2100                   | UG/KG         | SLUDGE         | PEST             |
| SLUDGE SAMPLE               | WS00003 TCLP NVE       | 1/11/00 4-  | Methylphenol                                  |  | 0.016 J                | MG/L          | SLUDGE         | svoc             |
| ROM VAC TRUCKS              | WS00003 TCLP NVE       |             | Henium TR                                     | 1                                      | 0.042                  | MG/L          | SLUDGE         | METALS           |
|                             | WS00003 TCLP NVE       | 1/11/00 Ba  | irium TR                                      | 100                                    | 1.07                   | MG/L          | SLUDGE         | METALS           |
|                             | WS00003 TCLP NVE       | 1/11/00 Cd  |   |  | 0.0072                 | MG/L          |                | METALS           |
|                             | WS00003 TCLP NVE       | 1/11/00 Zir |   |  | 22.3                   | MG/L          |                | METALS           |

Areas highlighted in yellow indicate exceedences over the Ohio EPA TCLP Regulatory Level.

J: Estimated value
MG/L: milligrams per liter
MG/KG: milligrams per kilogram
UG/L: micrograms per liter
UG/KG: micrograms per kilogram
VOC: volatile organic compound

## SEWER CLEANOUT SUMMARY OF POSITIVE DETECTIONS

| REGULATORY ORIGIN SAMPLE ID DATESAMP PARAMETER LEVEL RESULT QUAL UNITS MATRIX GROU |        |           |          |           | OHIO EPA TCL |      |       |        |       |
|--|--------|-----------|----------|-----------|--------------|------|-------|--------|-------|
|  | ORIGIN | SAMPLE ID | DATESAMP | PARAMETER |              | QUAL | UNITS | MATRIX | GROUP |

SVOC: semi-volatile organic compound TCLP: toxicity characteristic leaching procedure PEST: pesticide HERB: herbicide

October 7, 1998

To: Gary Stanczuk via fax 248.576.7369

From: PJ Stock

Cc: Mike Carlo, Craig Miller, Thom Kubeshesky, Darwin Loyer

Re: Dayton Thermal Products Revised Scope / Re-quote / Project Completion.

In order for CET personnel to plan ahead, I would like to confirm the tentative schedule of events:

By October 12 - Plans and specs completed by LJB & to Chrysler for review.

By October 14 - First review completed & returned to LJB.

By October 19 – Revisions completed by LJB.

By October 20 - Plans and specs to Chrysler and CET for quoting.

By October 23 - Quote submitted to Chrysler Purchasing and Dayton by CET.

By October 27 - Chrysler Dayton completed quote review

By October 30 - Value analysis and final review by Chrysler Purchasing and CET.

By November 18 – CET mobilize to begin work. This date may move earlier in November depending on arrival of materials from manufacturers.

Best case scenario completion early December. Worst case scenario completion mid January.

If there are any delays during the above described time table, all following completion dates will adjust accordingly. The general consensus was that the time table is optimistic. Let me know if there are any dates or other information to further clarify.

Thanks,

OCT 07 '98 11:09

11/04/50 11.04 PAA OLO 400 0011 OUNT CARLO INC

JOHN CARLO, INC.

G. STANCZUK ACTIVITY UNIT PRICE SUMMARY

JOHN CARLO, INC. 983022 DRAIN DECK-DAYTON THERMAL PLANT DAYTON,O

Calendar Biditem Description Quantity Unit WC Hrs/Shift Activity

INSTALL NEW SUMP 800.00 SF 23,383 DRIVE SHEETING FOUR SIDES, 15' X 9' X 15' DEEP 1.00 LS 6,826 EXCAVATE FOR NEW SUMP 15' X 9' X 15' X 20% DISPOSE OF SOIL AND CONCRET

15' X 15' X 9' X 20%, .83'THICK CONCRETE 1.00 LS '-\star SUMP 11,725 1.00 LS 6' X 14' PRE-CAST MANHOLE 11,233 80.00 TON BACKFILL 15' X 9' X 14' LESS SUMP CONCRETE FLOOR 1.00 CYD 15'X 9' X .83', DOWELS, RE-ROD 73,161 \*\*\*\*\* Biditem/Category

AFIBER GLASS SUMP NOT INCLUDED

\*\*\* REPORT TOTALS \*\*\* # 441,707 \$289,020

Estimate Detail has been entered on TAKEOFF Quantities.

(was

W/O FIBERGLASS

2 - AREA TOTAL

49,647 3 - AREA TOTAL

New oven

Tairles View Ports \$500 aught for each

NOU 04 '98 11:32

# ACTIVITY TEMPLATE INDIRECT COSTS

| BID/CATE | ************************************** | rions and mor | BILIZATION      | 1           |
|----------|--|---------------|-----------------|-------------|
| Activity | Description                            | Quantity      | Units<br>Detail | Description |
| 1        | PROJECT ADMINISTRATION                 |               |                 | •           |
| 2        | SUBMITTALS                             |               |                 |             |
| 3        | PERMITS                                |               | -               |             |
| 4        | MOBILIZATION                           |               |                 |             |
| 5        | MISC. MATERIAL                         |               |                 |             |
| BID/CATE | ************************************** | CAVATION      |                 | 1.          |
| Activity | Description                            | Quantity      | Units<br>Detail | Description |
| 1        | SAWCUT & REMOVE CONCRETE               |               |                 | •           |
| 2        | DISPOSE OF CONCRETE                    |               |                 |             |
| 3        | EXCAVATE FOR DRAIN                     | <del></del>   |                 |             |
| 4        | DISPOSE OF SOIL                        |               |                 |             |
| BID/CATE | ************************************** | STALLATION    |                 | 1.          |
| Activity | Description                            | Quantity      | Units<br>Detail | Description |
| 1        | DRAIN INSTALLATION                     |               | Decair          | Describeron |
| 2        | ACO DRAIN                              |               |                 |             |

## ACTIVITY TEMPLATE INDIRECT COSTS

| Activity | Description                            | Quantity   | Units           |             |
|----------|--|------------|-----------------|-------------|
|          | PULL FORMS                             | Quant 201  | Detail          | Description |
| 3        |  |            |                 |             |
| BID/CATE | ************************************** | STING SUMP |                 |             |
| Activity | Description                            | Quantity   |                 | Description |
| 1        | REMOVE PUMPS AND ELECTRIC              |            | _ <del></del>   | Description |
| 2        | BACKFILL SUMPS                         |            |                 |             |
| 3        | TESTING                                |            | <del></del>     | ·           |
| 4        | CONCRETE FLOOR                         |            |                 |             |
| RID/CATE | ************************************** | SUMP       |                 |             |
| ctivity  | Description                            | Quantity   | Units<br>Detail | Description |
| 1        | REMOVE EXISTING STAIR                  |            |                 | •           |
| 10       | GUARD RAIL                             |            |                 |             |
|          |  |            |                 |             |
| 2        | DRIVE SHEETING                         |            |                 |             |
| 3        | EXCAVATE FOR NEW SUMP                  |            | ·               |             |
| 3        |  |            |                 |             |

| 98-302   | DRAIN     | DECK-DAYTON | THERMAL | PLANT | DAYTON, O |
|----------|-----------|-------------|---------|-------|-----------|
| +++ DADE | TANT TANK | 70D         |         |       |           |

ACTIVITY TEMPLATE INDIRECT COSTS

| BID/CATE      | GORY: 5 INSTALL NEW &   | SUMP     | ****            | *****       |
|---------------|-------------------------|----------|-----------------|-------------|
| Activity<br>6 | Description<br>BACKFILL | Quantity | Units<br>Detail | Description |
| 7             | CONCRETE FLOOR          |          |                 |             |
| 8             | SEAL COAT SUMP          |          | <u> </u>        |             |



## DRAFT

October 26, 1998

Chrysler Corporation Purchasing Chrysler Technology Center 800 Chrysler Drive Auburn Hills, Michigan 48326-2757

Attn: Mr. Keith A. Coney

Re: Revision to Quote Dated September 8, 1998

Dual Containment Drain Deck for Silicate System

**Dayton Plant** 

Building number 40 B

#### - PROPOSAL -

Carlo Environmental Technologies, Inc., (CET), is pleased to submit to you the enclosed quotation for the above referenced project. This proposal is based on preliminary plans. The prices listed in this proposal will be verified once final plans and specifications have been received.

### Scope of Work:

The scope of work for this project includes mobilization, floor drain excavation, floor drain installation, abandoning existing sump, installation of a new sump. An activity breakdown of each bid item is attached.

1) General conditions and mobilization

Project Administration Submittals Mobilization

Miscellaneous Material

1 ls

\$ 53,140.00

Carlo Environmental Technologies, Inc. 44907 Trinity Drive P.O. Box 744 Clinton Twp.. M1 48038-0744 810-468-9580 1-800-238-9042 FAX 810-468-9589

EST.#98-302.2

DRAFT

Chrysler Corporation Purchasing October 26, 1998 Page two

| 2) | Floor drain excavation Sawcut, Excavation, Etc. 1 Is               | \$ 40,557.00                   |
|----|--|--------------------------------|
|    | Dispose of soil 222 ton \$45.05                                    | \$ 10,000.00                   |
| 3) | Floor drain installation ACO Drain 1 Is                            | \$ 148,629.00                  |
|    | Install ACO Drain  1 Is  | \$ 94,321.00                   |
| 4) | Abandon existing sump 1 ls   | \$ 13,000.00                   |
| 5) | Install new sump Remove stair, Sheet, Excavate, Install Concrete S | Sump, Backfill<br>\$ 75,535.00 |
|    | Disposal of Soil and Concrete<br>148 ton \$ 34.66                  | \$ 5,130.00                    |

**Total** 

### **Bid Qualifications:**

1) The following items are not included in the base bid:

Permits, licenses, or notifications.

Utility protection, repairs, removal or replacement.

EST.#98-302.2

\$ 440,312.00

DRAFT

Chrysler Corporation Purchasing October 26, 1998 Page three

Dewatering.

Sampling or analytical.

Sump clean out or disposal of sludge.

Floor sealer or hardeners.

Fiberglass inner sump

- Disposal of concrete and soil will be at the Big Foot Landfill Facility under the existing waste approval as non-hazardous material.
- 3) Turn around time for sampling and analytical will be two days.
- 4) Concrete will be supplied by transit ready-mix trucks.
- 5) Broken concrete may be stockpiled on visqueen until removed and disposed of.
- 6) Due to a lack of shop drawings for the floor drain the connection to the new sump is assumed to be made by a cast in place circular opening in the pre-cast manhole at an allowance of \$500.00. We have also assumed depths and quantities for the drain installation.
- 7) Trade unions for the sump removal will be, electrical, pipe fitters, and mechanical.
- 8) Operating Engineers will be used for all other work inside the factory.
- 9) We do not see a connection between figures 1, 2, 3 and the scope of our work for the floor drain. Any work in this area has not been included.
- 10) See facsimilie transmission of October 24, 1998 for additional qualifications, (attached).

EST.//98-302.2

Chrysler Corporation Purchasing October 26, 1998 Page four

## DRAFT

### Conditions:

- 1) Chrysler Corporation Purchasing agrees to provide an environmental engineer for this project, who will be responsible for all technical decisions.
- 2) CET will work under the direction of Chrysler Corporation Purchasing to execute the work plan.
- 3) Full payment is due within thirty days after receipt of invoice. A 1.5% per month service charge will be assessed on the unpaid balance thereafter as a time-price differential. A 1% discount is allowed if payment is received by us within 5 days of receipt of our invoice.
- 4) This proposal is valid for 30 days from the date of issue,

| Respectfully submitted,                    |                                 |      |
|--|---------------------------------|------|
| CARLO ENVIRONMENTAL TECHNOL                | OGIES, INC.                     |      |
|  |                                 |      |
| Patrick J. Stock<br>Director of Operations | Date                            |      |
| ,  | Accepted by:                    |      |
|  | Chrysler Corporation Purchasing | Date |
|  | Witness                         | Date |

EST.#93-302.2





### EDR-AuditCheck<sup>TM</sup>

**Facility Report** 

1600 WEBSTER STREET 1600 Webster Street Dayton, OH 45404

Inquiry Number: 1205691.1p

October 22, 1997

### The Source For Environmental Risk Management Data

3530 Post Road Southport, Connecticut 06490

**Nationwide Customer Service** 

Telephone: 1-800-352-0050 Fax: 1-800-231-6802 Internet: www.edrnet.com

#### TABLE OF CONTENTS

The AuditCheck<sup>™</sup> Facility Report is a comprehensive presentation of government filings on a facility identified in a search of over 4 million government records from more than 600 federal, state and local environmental databases. The report is divided into three sections:

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

#### Disclaimer

This Report contains information obtained from a variety of public sources and EDR makes no representation or warranty regarding the accuracy, reliability, quality, or completeness of said information contained in this report. The customer shall assume full responsibility for the use of this report. No warranty of merchantability or of fitness for a particular purpose, expressed or implied, shall apply and EDR specifically disclaims the making of such warranties. In no event shall EDR be liable to anyone for special, incidental, consequential or exemplary damages. Copyright (c) 1996 by EDR. All rights reserved.

### **SECTION 1: FACILITY SUMMARY**

. Due to inconsistent name and/or locational information, records on the same facility may be listed in separate facility columns.

|  | RECORD 1<br>ACUSTAR<br>1600 WEBSTER ST<br>DAYTON, OH 45401<br>EDR ID #1000842185<br>EPA #OHD074703547 | RECORD 2<br>CHRYSLER DAYTON THERMA<br>1600 WEBSTER ST<br>DAYTON, OH 45401<br>EDR ID #S101565532 | RECORD 3<br>ACUSTAR, INC.<br>1600 WEBSTER ST<br>DAYTON, OH 45404<br>EDR ID #U002171817 |
|--|---|---|--|
| AIR EMISSIONS Facility has permitted air emissions (AIRS)  | NO  | NO  | NO   |
| Facility has reported emergency releases to air (ERNS/A)   | NO  | NO  | NO   |
| Facility has compliance data (AIRS/COM)  | NO  | NO  | NO   |
| WATER DISCHARGES Facility has permitted waste water discharges (PCS)   | NO  | NO  | NO   |
| Facility has reported emergency releases to water (ERNS/W)   | NO  | NO  | NO   |
| Facility has enforcement actions (PCS/ENF)   | NO  | NO  | NO   |
| WASTE MANAGEMENT Facility generates hazardous waste (RCRIS)  | YES - p6  | NO  | NO   |
| Facility treats, stores, or disposes of hazardous waste on-site (RCRIS/TSDF)   | NO ,  | NO  | NO   |
| Facility has received Notices of Violations (RCR\S/VIOL)   | YES - p7 ✓  | NO  | NO   |
| Facility has been subject to RCRA administrative actions (RAATS)   | NO  | NO  | NO   |
| Facility has been subject to corrective actions (CORRACTS)   | NO  | NO  | NO   |
| Facility handles PCBs (PADS)   | YES - p8  | NO  | NO   |
| Facility uses radioactive materials (MLTS)   | NO  | NO  | NO   |
| Facility manages registered aboveground storage tanks (AST)  | NO  | NO  | NO .   |
| Facility manages registered underground storage tanks (UST)  | NO  | NO /  | YES - p19  |
| Facility has reported leaking underground storage tank incidents (LUST)  | NO  | YES - p16   | NO   |
| Facility has reported emergency releases to the soil (ERNS)  | NO  | NO  | NO   |
| Facility has reported hazardous material incidents to DOT (HMIRS)  | NO  | NO  | NO   |
| WASTE DISPOSAL<br>Facility is a Superfund Site (NPL)   | NO  | NO  | NO   |
| Facility has a Record of Decision on it (ROD)  | NO  | NO  | NO   |
| Facility is not a Superfund Site but has a known or suspect abandoned, inactive or uncontrolled hazardous waste site (CERCLIS) | NO  | NO  | МО   |
| Facility has a reported Superfund Lien on it (LIENS)   | NO  | NO  | NO   |
| Facility is listed as a state hazardous waste site (SHWS)  | NO  | NO  | NO   |
| Facility has disposed of solid waste on-site (SWF/LF)  | NO  | NO  | NO   |
| MULTIMEDIA Facility uses toxic chemicals and has notified EPA under SARA Title III, Section 313 (TRIS)                         | YES - p9  | NO  | NO   |
| Facility produces pesticides and has notified EPA under Section 7 of FIFRA (SSTS)  | NO  | NO  | NO   |
| Facility manufactures or imports toxic chemicals on the TSCA list (TSCA)   | NO  | NO  | NO   |
| Facility has enforcement actions under FIFRA, TSCA or EPCRA (FTTS)   | NO  | NO  | NO   |
| Facility is listed in EPA's index system (FINDS)   | YES - p10   | NO  | NO   |
| Facility is listed in a county/local unique database (LOCAL)   | YES - p14   | YES - p17   | NO   |
| HEALTH AND SAFETY Facility has been inspected by the Occupational Safety and Health Administration (OSHA)                      | NO  | NO  | NO   |
| Facility has violations under the Occupational Safety and Health Administration (OSHA/VIOL)                                    | NO  | NO  | NO   |
| Facility has had accidents according to the Occupational Safety and Health Administration (OSHA/ACC)                           | NO  | NO  | NO   |
| TOTAL (YES)  | 6   | 2   | 11   |

<sup>-</sup> A "NO" indicates that no findings were identified based on an exact name, address and/or EPA facility identification number search. Facility information may be available under an alternate name, address and/or EPA identification number.